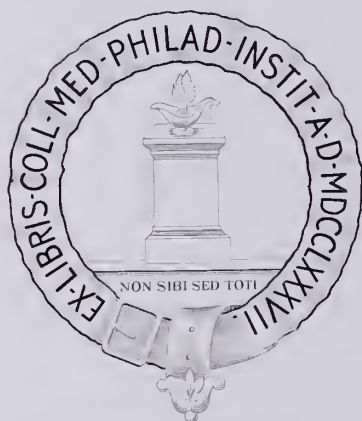


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January 1977
Volume 75
Number 1

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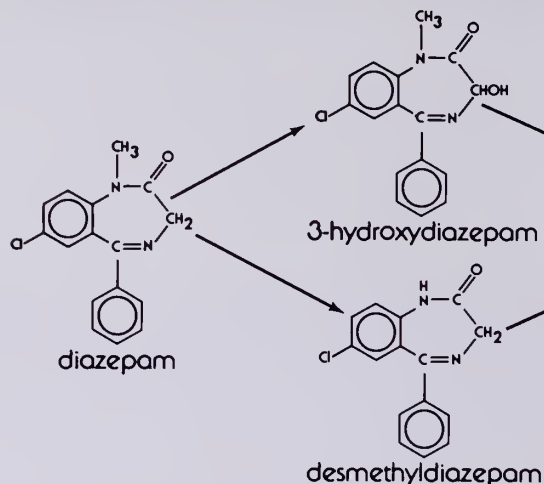
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Journal of The K E N T U C K Y Medical Association

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MESSAGE FROM THE PRESIDENT

Recent newspaper accounts of walkouts by professional groups in our state serve to focus attention on certain problems peculiar to the relationship of these groups of individuals to their governing bodies.

The classroom teachers of our state and the majority of the state's physicians spend all or a major part of their professional life operating under the guidelines and supervision of boards usually made up of lay persons. This governing by non-professionals in the case of teachers may be somewhat different since trained educators hold administrative positions in the school systems. However, there are no such physician representatives serving as administrators in most hospitals. In recent years, most hospitals have begun including members of the staff on their boards of trustees. These are often just enough in number to give token representation, however.

It is unfortunate whenever group political action is necessary to secure the basic needs of the individual. Professional persons have traditionally avoided this well known and often used mechanism.

In the day of the consumer, the noise generated by a vocal minority is often heard by governing boards louder than the soft whisper of professional discontent.

There is obviously no simple answer to these complex problems but any solution on the part of the professional which does harm to the very person he is trained to teach or minister to is not the proper approach.

By the same token, any lay board whose knowledge of the profession its members are elected to govern is very superficial or casual must use great wisdom in its decisions.

This wisdom of necessity should be first hand either gained in the practice of that art or gleaned from personal contact and thought interchange from those who do practice it.

There are more frequent examples in Kentucky of hospital boards of trustees making decisions that involve the practice of medicine over the objections of medical staffs. These instances unless avoided by a wise hospital administrator who is positioned between staff and board are unfortunate. They are unfortunate because hospital boards are usually composed of outstanding civic leaders who are experts in their own fields but are in no position to make medical decisions. The board in these instances is placed in untenable position and a staff which practices under these conditions finds the freedom to practice medicine compromised.

One could ask what as a professional organization could we do to aid physicians in the Commonwealth who practice medicine under such circumstances. If our organization did no more than gather such data, review and make public comment on same, then we might more effectively serve those whom we have been elected to serve.

As the KMA finds ways to better serve the physicians of Kentucky, whether the physician is a member of KMA or not, then we fully justify our existence as an organization dedicated to serve the citizens of this Commonwealth with quality health care.

John M. Baird, M.D.
KMA Vice-President

This is the first in a series of articles written at the request of KMA President, Paul J. Parks, M.D.



POSTGRADUATE OPPORTUNITIES



IN KENTUCKY

JANUARY

- 19 "Health Care for Adolescents,"** Health Sciences Center, Louisville
- 26 Clinico-Pathological Conference, 7 p.m., sponsored by Letcher County Medical Society Whitesburg Appalachian Regional Hospital, Whitesburg
- 26 "Suicide,"** Louisville Area CME Consortium, Health Sciences Center, Louisville

FEBRUARY

- 2 "The Immune System: General Introduction and Functional Evaluation,"** PCP Series, Health Sciences Center, Louisville
- 9-11 "Clinical Relevance of Recent Advances in Internal Medicine," sponsored by American College of Physicians and University of Kentucky College of Medicine (21 1/2 hours, Category I credit), Lexington
- 10 KMA House of Delegates Special Session, Ramada Inn-Hurstbourne, Louisville
- 11-12 Third International Symposium on Psychopharmacology, Department of Psychiatry, University of Louisville School of Medicine, Louisville
- 16 "Differential Diagnosis of Dysphagia,"** PCP Series, Health Sciences Center, Louisville
- 20-26 Seventh Family Medicine Review,* University of Kentucky Medical Center, Lexington
- 22 "Respiratory Therapy in the Intensive Care Unit," 7 p.m., sponsored by Letcher County Medical Society, Whitesburg Appalachian Regional Hospital, Whitesburg
- 23 "Adult Respiratory Distress Syndrome," Louisville Area CME Consortium, Health Sciences Center, Louisville
- 25-26 Breast Cancer Management Symposium and Workshop, University of Louisville School of Medicine, Stouffer's Inn, Louisville
- 26 13th Annual Symposium on Oropharyngeal Cancer, Health Sciences Center, Louisville

MARCH

- 2 "Symposium on Critical Orthopedic Diagnosis,"** Health Sciences Center, Louisville

- 5 "Joint Practice: Now and In The Future," seminar sponsored by KMA-KNA Joint Practice Committee, Ramada Inn-Bluegrass Convention Center, Louisville
- 16 "Manifestation of Rheumatoid Arthritis,"** Health Sciences Center, Louisville
- 23 "Snake Bites and Allergic Reactions to Insect Stings,"** Louisville Area CME Consortium, Health Sciences Center, Louisville
- 28 W. O. Johnson Lecture,** Health Sciences Center, Louisville
- 30-31 23rd Annual Heart Symposium on Cardiovascular Diseases, Health Sciences Center, Louisville

APRIL

- 7 22nd Annual Clinical Conference, "Newer Approaches to Allergic Disorders," Lexington Clinic, Lexington

IN SURROUNDING STATES

JANUARY

- 28-30 AMA Congress on Medical Education, Palmer House, Chicago

FEBRUARY

- 4-6 "The Impaired Physician," sponsored by AMA and Medical Association of Georgia, Hyatt Regency Hotel, Atlanta. Registration fee: \$50. Contact: AMA, Department of Mental Health, 535 N. Dearborn, Chicago, IL 60610

Coming Up—

Emergency Health Care Seminar, May 25-26
KMA Annual Meeting, September 27-29

Oral Cancer Symposium Set For Feb. 26 at U of L

The 13th Annual Symposium on Oropharyngeal Cancer will be held Saturday, February 26, in the Health Sciences Center at the University of Louisville School of Medicine. Sponsored by the U of L School of Medicine and the School of Dentistry, the symposium is open to all physicians and dentists and will run from 8:30 a.m. to 12:30 p.m.

This year's theme is "Team Approach to Oropharyngeal Cancer" and scientific presentations will be made by consultants from the Ellis Fishel State Cancer Hospital in Columbia, Missouri.

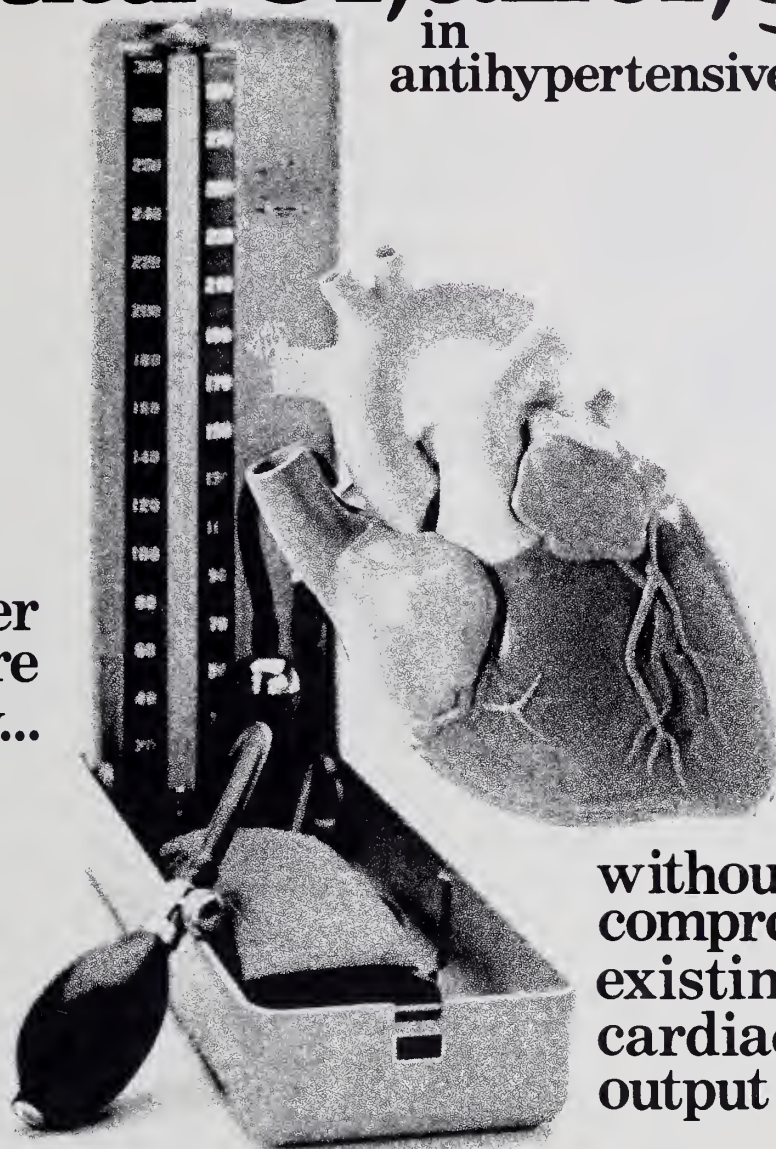
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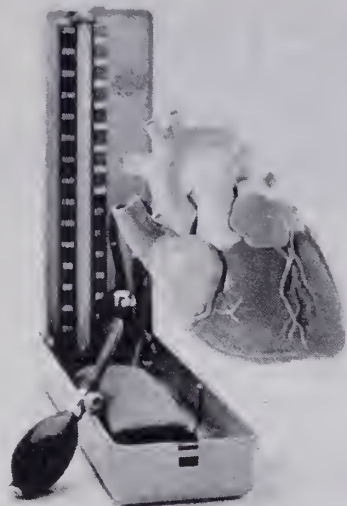
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Warnings: It is important to recognize that a positive Coombs test, hemolytic anemia, and liver disorders may occur with methyldopa therapy. The rare occurrences of hemolytic anemia or liver disorders could lead to potentially fatal complications unless properly recognized and managed. Read this section carefully to understand these reactions.

With prolonged methyldopa therapy, 10% to 20% of patients develop a positive direct Coombs test, usually between 6 and 12 months of therapy. Lowest incidence is at daily dosage of 1 g or less. This on rare occasions may be associated with hemolytic anemia, which could lead to potentially fatal complications. One cannot predict which patients with a positive direct Coombs test may develop hemolytic anemia. Prior existence or development of a positive direct Coombs test is not in itself a contraindication to use of methyldopa. If a positive Coombs test develops during methyldopa therapy, determine whether hemolytic anemia exists and whether the positive Coombs test may be a problem. For example, in addition to a positive direct Coombs test there is less often a positive indirect Coombs test which may interfere with cross matching of blood.

At the start of methyldopa therapy, it is desirable to do a blood count (hematocrit, hemoglobin, or red cell count) for a baseline or to establish whether there is anemia. Periodic blood counts should be done during therapy to detect hemolytic anemia. It may be useful to do a direct Coombs test before therapy and at 6 and 12 months after the start of therapy. If Coombs-positive hemolytic anemia occurs, the cause may be methyldopa and the drug should be discontinued. Usually the anemia remits promptly. If not, corticosteroids may be given and other causes of anemia should be considered. If the hemolytic anemia is related to methyldopa, the drug should not be reinstituted. When methyldopa causes Coombs positivity alone or with hemolytic anemia, the red cell is usually coated with gamma globulin of the IgG (gamma G) class only. The positive Coombs test may not revert to normal until weeks to months after methyldopa is stopped.

Should the need for transfusion arise in a patient receiving methyldopa, both a direct and an indirect Coombs test should be performed on his blood. In the absence of hemolytic anemia, usually only the direct Coombs test will be positive. A positive direct Coombs test alone will not interfere with typing or

cross matching. If the indirect Coombs test is also positive, problems may arise in the major cross match and the assistance of a hematologist or transfusion expert will be needed.

Fever has occurred within first 3 weeks of therapy, sometimes with eosinophilia or abnormalities in liver function tests, such as serum alkaline phosphatase, serum transaminases (SGOT, SGPT), bilirubin, cephalin cholesterol flocculation, prothrombin time, and bromsulphalein retention. Jaundice, with or without fever, may occur, with onset usually in the first 2 to 3 months of therapy. In some patients the findings are consistent with those of cholestasis. Rarely fatal hepatic necrosis has been reported. These hepatic changes may represent hypersensitivity reactions; periodic determination of hepatic function should be done particularly during the first 6 to 12 weeks of therapy or whenever an unexplained fever occurs. If fever and abnormalities in liver function tests or jaundice appear, stop therapy with methyldopa. If caused by methyldopa, the temperature and abnormalities in liver function characteristically have reverted to normal when the drug was discontinued. Methyldopa should not be reinstituted in such patients.

Rarely, a reversible reduction of the white blood cell count with primary effect on granulocytes has been seen. Reversible thrombocytopenia has occurred rarely. When used with other antihypertensive drugs, potentiation of antihypertensive effect may occur. Patients should be followed carefully to detect side reactions or unusual manifestations of drug idiosyncrasy.

Use in Pregnancy: Use of any drug in women who are or may become pregnant requires that anticipated benefits be weighed against possible risks; possibility of fetal injury can not be excluded.

Precautions: Should be used with caution in patients with history of previous liver disease or dysfunction (see Warnings). May interfere with measurement of: uric acid by the phosphotungstate method, creatinine by the alkaline picrate method, and SGOT by colorimetric methods. Since methyldopa causes fluorescence in urine samples at the same wavelengths as catecholamines, falsely high levels of urinary catecholamines may be reported. This will interfere with the diagnosis of pheochromocytoma. It is important to recognize this phenomenon before a patient with a possible pheochromocytoma is subjected to surgery. Methyldopa is not recommended for patients with pheochromocytoma. Urine exposed to air after voiding may darken because of breakdown of methyldopa or its metabolites.

Stop drug if involuntary choreoathetotic movements occur in patients with severe bilateral cerebrovascular disease. Patients may require reduced doses of anesthetics; hypotension occurring during anesthesia usually can be controlled with vasopressors. Hypertension has recurred after dialysis in patients on methyldopa because the drug is removed by this procedure.

Adverse Reactions: *Central nervous system:* Sedation, headache, asthenia or weakness, usually early and transient; dizziness, lightheadedness, symptoms of cerebrovascular insufficiency, paresthesias, parkinsonism, Bell's palsy, decreased mental acuity, involuntary choreoathetotic movements; psychic disturbances, including nightmares and reversible mild psychoses or depression.

Cardiovascular: Bradycardia, aggravation of angina pectoris. Orthostatic hypotension (decrease daily dosage). Edema (and weight gain) usually relieved by use of a diuretic. (Discontinue methyldopa if edema progresses or signs of heart failure appear.)

Gastrointestinal: Nausea, vomiting, distention, constipation, flatus, diarrhea, mild dryness of mouth, sore or "black" tongue, pancreatitis, sialadenitis.

Hepatic: Abnormal liver function tests, jaundice, liver disorders.

Hematologic: Positive Coombs test, hemolytic anemia. Leukopenia, granulocytopenia, thrombocytopenia.

Allergic: Drug-related fever, myocarditis.

Other: Nasal stuffiness, rise in BUN, breast enlargement, gynecomastia, lactation, impotence, decreased libido, dermatologic reactions including eczema and lichenoid eruptions, mild arthralgia, myalgia.

Note: Initial adult dosage should be limited to 500 mg daily when given with antihypertensives other than thiazides. Tolerance may occur, usually between second and third month of therapy; increased dosage or adding a thiazide frequently restores effective control. Patients with impaired renal function may respond to smaller doses. Syncope in older patients may be related to increased sensitivity and advanced arteriosclerotic vascular disease; this may be avoided by lower doses.

How Supplied: Tablets, containing 125 mg methyldopa each, in bottles of 100; Tablets, containing 250 mg methyldopa each, in single-unit packages of 100 and bottles of 100 and 1000; Tablets, containing 500 mg methyldopa each, in single-unit packages of 100 and bottles of 100.

For more detailed information, consult your MSD representative or see full prescribing information. Merck Sharp & Dohme, Division of Merck & Co., Inc., West Point, Pa. 19486

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VOLUME 75

JANUARY 1977

NUMBER 1

Erythroblastosis in a Twin Gestation: A Case Report

J. PATRICK LAVERY, M.D., LARRY N. COOK, M.D., and
JOHN T. QUEENAN, M.D.

Louisville, Kentucky

A patient who illustrates the problem of "first immunized pregnancy" is reported. This case report shows some aspects of management in the care of the Rh-immunized pregnancy as well as the additional problem of multiple gestation.

THE patient with an Rh-immunized pregnancy is a less frequent visitor to active obstetrical practices. The introduction of Rh immune globulin has significantly reduced the occurrence of Rh immunization. Nonetheless, between 9 and 22% of women today who are at risk for Rh immunization are still not treated with immune globulin.¹

Rh immunization occurs in the first pregnancy in one to two percent of Rh negative patients.² This problem will remain in obstetrics despite the advent of immune globulin prophylaxis. A patient who illustrates the problem of "first immunized pregnancy" as well as immunization to another red cell antigen is presented. This complex case report shows some aspects of management in the care of the Rh-immunized pregnancy as well as the additional problem of a multiple gestation.

Case Report

J.P. is a 23-year-old primigravida group O Rh negative female admitted to the hospital with a

diagnosis of premature labor and a ruptured Bartholin's abscess at 29½ weeks gestation. This labor was stopped with intravenous alcohol. Hematologic evaluation revealed an anemia (Hematocrit—27, Hemoglobin—9.1; an antibody screen showed an anti-Rh titer of 1024 and an anti-Kidd titer of 8. Kleihauer-Betke stain of peripheral blood revealed a significant fetomaternal transfusion. Previously, the patient had a negative antibody screen at 23 weeks gestation. There was no history of prior pregnancy, abortion or blood transfusion.

Ultrasonography prior to amniocentesis showed a twin gestation. An amniogram distinguished two amniotic sacs. Amniotic fluid was aspirated from each sac.

Serial amniocenteses showed a progressive rise in bilirubin concentration. Indigo carmine injection used to distinguish the sacs distorted one reading of the total bilirubin. The patient was delivered by primary Cesarean section at 33 weeks gestation because of rising amniotic fluid bilirubin. The patient's postoperative course was uneventful.

Twin A was an AGA 33 week large of discordant monozygotic twins with a birth weight of 1845 gm. Umbilical cord values indicated:

hemoglobin—16 grams %
bilirubin—6.5 gm %
platelet count—80,000
blood type—O positive
Kidd positive
Direct Coombs—reaction 3 +

The baby required two double volume exchange transfusions and a booster transfusion.

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Continuous phototherapy for five days regulated further hyperbilirubinemia. Physical examination was within normal limits with the exception of mild respiratory distress and a moderate enlargement of the liver and spleen. The respiratory distress was transient. Feedings were begun on the third day of life and on the seventh day of life the baby developed abdominal distention, blood diarrhea, bilious gastric residua, and x-ray evidence of pneumatosis intestinalis. A diagnosis of necrotizing enterocolitis was made. The baby responded to medical management including parenteral ampicillin and gentamicin, oral gentamicin, gastric decompression and total parenteral nutrition (33 days). At the end of three weeks oral feedings were reinstituted and advanced uneventfully. The infant was discharged on the 59th day of life with a weight of 2957 gm and a normal physical exam.

Twin B was prenatally considered to have severe erythroblastosis fetalis (EBF) on the basis of amniotic fluid optical densities. Amniogram did not yet show evidence of hydrops. Intrauterine growth retardation was suspected on the basis of low biparietal diameter determinations. The baby at delivery was a 1505 gm small for gestational age, 33 week discordant monozygotic twin. Physical examination revealed mild respiratory distress and abdominal distention which was not secondary to hepatosplenomegaly. Umbilical cord blood was reported with a:

hemoglobin—17 gm %
platelet count—110,000
bilirubin—6.5 mg %
blood type—O positive
Kidd positive
Direct Coombs reaction 3+

Radiographs taken for placement of the umbilical vessel catheter revealed that contrast material swallowed in utero from the amniogram had failed to progress into the colon. Coupled with the physical findings of abdominal distention a barium enema was done which showed a microcolon with free passage of contrast material into the peritoneal cavity. Because of rapidly rising bilirubin values, a double volume exchange transfusion was performed. Twin B was then taken to the operating room where exploratory laparotomy revealed an intestinal perforation of the descending colon with generalized peritonitis. The baby expired on the fourth day of life with respiratory insufficiency and generalized septicemia secondary to peritonitis.



FIG. 1 Kleihauer-Betke stain of maternal blood. Technique will give a "ghost" effect to maternal RBC while fetal RBC take dye.

Discussion

The Rh Problem

The potential for immunization in the first pregnancy was documented by several Kleihauer-Betke stains in this patient. Fear and Queenan³ have demonstrated that 38% of women show fetal erythrocytes in their circulation between 38 and 40 weeks. Usually the transplacental hemorrhage will not be in sufficient volume to induce immunization. A normal smear may show one to two fetal erythrocytes when scanned for ten minutes (consistent with .1 to 0.2 cc's of fetal blood transfused). In this instance (Figure 1) 554 fetal erythrocytes were documented in a ten minute scan. This represents approximately a 55 cc fetal-maternal transfusion. This volume is certainly sufficient to induce maternal immunization.

The patient's initial Rh titer of 1024 was evidence of significant immunization. A titer two months previous was negative. Each laboratory must define its own level of significance, that is, the titer below which no severely affected infant or stillbirth has occurred. Generally this will be in the range of 32. From this point, the bilirubin content of the amniotic fluid reflects the severity of anemia, that is, the degree to which the fetus

is affected. Thereafter evaluation must be performed by serial amniocentesis. This patient (Table 1) showed not only an Rh antibody titer at a significant level but also that an anti-Kidd antibody was present in the maternal serum. The Kidd antigen, although a weak antigen, was originally discovered in a patient whose child had hemolytic disease of the newborn and several cases of isoimmunization have been described.⁴ The frequency of serial amniotic fluid determinations is based on the severity of the disease. Generally samples every two to three weeks should be sufficient. However in this instance the severity warranted more frequent evaluation.

Table 1
ANTIBODY DETERMINATIONS
(Direct Coombs-Titer)

| Week of Gestation | 23 | 29 | 30 | 33 |
|-------------------|------|--------|--------|----------|
| Anti-Rh | None | 1:1024 | 1:1024 | 1:32,448 |
| Anti-Kidd | None | 1:8 | 1:32 | 1:1024 |

The likelihood of an irregular antibody being present was noted by Queenan, et al.⁴ In a review of over 18,000 consecutive obstetric patients irregular antibodies were detected in 299 (1.62%). It would thus be ideal to screen all Rh positive and Rh negative patients. A special concern should be given to those who have received blood transfusions, undergone Cesarean section or induced abortions where immunization to such an irregular antibody may have occurred.

The management of Rh immunization by serial amniocentesis for amniotic fluid bilirubin has been well documented and reviewed by Queenan.⁵ The serial determinations of the twin gestation are noted in Table 2. Of significance is the decline in the total bilirubin in Twin B from the 31st to the 32nd week. We believe this to be an artifact of the dye (indigo carmine) which was injected at the earlier amniocentesis. Such a dye, much like the turbidity of meconium, may deflect the tracing of the spectrophotometer and give a false value. Awareness of any contaminants (blood, meconium, dye) or artifact as prolonged exposure to light must be known to make

a satisfactory interpretation of the value obtained.

Bonsnes⁶ used a "corrected" determination to obviate such factors such as dye contamination, turbidity, and oxyhemoglobin. The "corrected" value is obtained by subtracting the optical density at 575 mu (the point of detection of oxyhemoglobin) from the optical density (OD) at 455 mu (Bilirubin peak). This difference "corrects" for excess oxyhemoglobin and turbidity. It would also seem to correct for indigo carmine.

The progressive rise in bilirubin can be noted with absorbance hence the process was affecting each twin. Both infants were verified as being Rh positive and Kidd positive. The lack of significant anemia in Twin B was not consistent with the elevated bilirubin found in the amniotic fluid. One possible explanation for this elevation was alluded to by Liley.⁷ He suggested that with gastrointestinal obstruction (Twin B had microcolon) regurgitation of bile may create false elevations in bilirubin determinations. Although both twins were affected, one cannot wonder as to whether one or two more weeks in utero could not have been obtained were this gastrointestinal anomaly not present.

To follow only one of these infants would not have been sufficient. Either one could have been affected to a significant degree requiring termination of the pregnancy.

The Twin Gestation

Twin gestations involve significant obstetrical complications. Monoamniotic twinning occurs in 7% of all twin gestations. This situation will have greater potential risk of twin to twin transfusion,

Table 2

Amniotic Fluid Bilirubin Determinations
OD△

| Twin A | | | Twin B | |
|----------------|-------|-------------|--------|-------------|
| Week Gestation | Total | "Corrected" | Total | "Corrected" |
| 30 | 0.04 | 0.12 | 0.04 | 0.13 |
| 31 | 0.05 | 0.12 | 0.06 | 0.16 |
| 32 | 0.03 | 0.14 | 0.02 | 0.29 |
| 33 | 0.10 | 0.26 | 0.14 | 0.44 |



FIG. 2 Amniogram shows margin of amniotic sac (arrows) outlining one cavity.

growth retardation, cord accidents and possible interlocking at vaginal delivery. The value of amniography in the assessment of multiple gestation is discussed by Dunnihoo and Harris. Figure 2 illustrates the separate amniotic sacs. The distinction between monoamniotic and diamniotic pregnancies has importance because of the elevated perinatal mortality associated with single sac multiple gestations.

Amniography also serves as a method of assessment of the severity of erythroblastosis fetalis (eg. scalp edema, presacral edema, placental size) and as an assessment of fetal function and well-being (eg. swallowing).

Other factors are important in the management of a twin gestation. Ultrasonography has found valuable use in the assessment of intrauterine growth retardation. The initial evaluation (Table 3) suggested a discrepancy of four weeks in gestational size. The occurrence of significant growth differential (ie., discordance in weight of greater than 25%) between twins is small (2.4%) in a series of 459 twins at the University of Oregon and 5% in a series of 365 twins. Such discordance is significant to later development and an educational achievement. Our concern for the apparent poor growth pattern of Twin B was reinforced by its failure to achieve parallel development by ultrasonographic evaluation two weeks later. A venous-venous anastomosis was documented in the placenta after delivery.

The expected growth rate of twins after the 29th week will not match that of singletons. The difference in weight at delivery (1845 gm vs. 1505 gm) was consistent with our ultrasonographic findings. Were this pregnancy to have continued, however, very reasonable concern would have to be exercised in the management of a potentially growth retarded fetus. Our methods of following such a problem (estriol, ultrasound, OCT) would be compromised by the presence of twins. A decision based solely on ultrasonography may be the only reasonable technique to define intrauterine growth retardation in such a setting.

Amniocentesis

Amniocentesis can never be looked upon as a benign procedure despite the appropriate precaution of ultrasonography. Even though the morbidity is low and early work by Freda⁸ showed no resultant maternal nor fetal morbidity, reports in the recent literature have noted episodes of fetal trauma. Cases of neonatal pneumothorax, maternal amnionitis, fetal cardiac tamponade, and other fetal trauma leading to intrauterine bleeding have all been reported.

The likelihood of spontaneous bowel perforation is small and not frequently seen in the large bowel. In their text, Schaffer and Avery⁹ cite the frequency of meconium peritonitis as 3/108,000 cases from a review. The occurrence of this condition is usually associated with other pathology, et. al., asphyxia, volvulus, intraperitoneal bands, obstruction, and sepsis. The appearance at surgery suggested that the perforation which occurred was approximately one week in age. The pathologic finding of microcolon may have led to the spontaneous perforation. There was no evidence of detectible skin trauma on careful examination of this infant. Although iatrogenic performance can certainly not be completely ruled out, the clinical state of the infants suggests that the intestinal obstruction may have led to the perforation. The elevated amniotic fluid bilirubin which became the final reason for delivery may have come about because of fetal regurgitation of gastrointestinal contents.

Summary

The possibility of Rh immunization in a first pregnancy is a reality. The physician must be alert in obtaining antibody titers in Rh negative individuals at their initial visit, at 28, 32, 36, and 40 weeks. The screening for irregular antibodies is indicated in the patient with a history of transfusion, Cesarean section, and abortion. In the Rh-immunized pregnancy once a critical antibody titer has been reached one must follow up with amniotic fluid analysis. Awareness, of irregular

Table 3

| Biparietal Diameter (Gestational week by Normogram) ²⁸ | Week of Gestation | | |
|---|-------------------|----------|----------|
| | 30 | 31 | 32 |
| Twin A | 8 cm (33) | HM | 8.5 (35) |
| Twin B | 7 cm (29) | 7.3 (30) | 7.3 (30) |

HM = Head Measurement

antibodies is necessary and even in Rh positive patients a screen is appropriate at the initial exam and at 36 weeks gestational age.

In twin gestations where Rh immunization is present, both twins must be followed serially as either or both may be affected to a point where preterm delivery may be necessary.

References

1. ACOG Technical Bulletin. Current user of Rho Immune Globulin #35, Jan., 1976.
2. Freda, V. J., The Rh problem in obstetrics and a new concept of its management using amniocentesis and spectrophotometric scanning of amniotic fluid. *Am. J. Obst-Gynec.* 93:321, 1965.

3. Fear, R. W. and Queenan, J. T., Factors affecting the trans-placental passage of fetal erythrocytes. *Obstet.-Gynec.* (Abst) 29:444, 1967.
4. Queenan, J. T., et. al., Irregular Antibodies in the Obstetric Patient. *Am. J. Ob-Gyn.* Vol. 34, p. 767, 1969.
5. Queenan, J. T., Modern Management of the Rh Problem. 1st Edition. Harper & Row. N.Y. 1967.
6. Bonsnes, R. W., Model 202 analysis bilirubin content of amniotic fluid. *Instrument News*, 16:14, 1965.
7. Liley, A. W., Errors in the assessment of hemolytic disease from amniotic fluid. *Am. J. Obs-Gyn.* Vol. 86, p. 485, 1963.
8. Freda, J., Recent Obstetrical Advances in Rh Problems. *Bull. N.Y. Acad. Med.* 42:475-501, 1966.
9. Diseases of the Newborn, 3rd. ed. 1971. C1. 41 p. 358. A. J. Schaffer & M. E. Avery.

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Some Perspectives on the Problem of Gonorrhea†

PHILIP G. WEILER, M.D. and DANIEL E. MADDOX, M.D.

Lexington, Kentucky

The exponential increase in the prevalence of gonorrhea calls for a better understanding of what is being done in the field to attack the problem. An examination of recent research and developments can lead toward application of improved community control interventions.

MUCH has been said recently about the exponential rise in prevalence of gonorrhea in the United States during the 1960's and 1970's. Many would regard gonococcal disease as the greatest present challenge to the medical community concerned with infectious disease.¹ On a national scale recent statistics² indicate the total number of reported cases has risen since 1965 from 324,000 to 1 million in 1974. Experts estimate that the ratio of reported cases to unreported cases is one to four. When the cases are broken down to standard rates by geographic region, the East South Central region (which includes Kentucky) has the second highest case rate, 556 per 10⁵ population, of all of the nine geographic regions of the United States. The highest case rate occurred in the South Atlantic Region, which includes Florida, Georgia, the Carolinas, the Virginias (both of which share borders with Kentucky), Maryland and Delaware. Because of the magnitude of the problem there is a need to obtain some perspectives on the myriad of solutions that are being pursued.

It has become increasingly clear that the classical medical model of simply treating symptomatic cases of gonococcal disease as they present themselves to the medical community (along with exhortations for patients to refer contacts for treatment) is failing, even as a stopgap measure. The control of gonorrhea will never be realized until a clear commitment is made toward this end. Only

a carefully constructed multi-faceted cooperative effort by the medical profession will succeed. This effort must be made in light of the available data and research findings.

This paper will examine the current literature concerning the control/ eradication of gonorrhea and discuss some additional approaches to gonorrhea control which should be instituted on the local level.

Research Directions

Basically there are eight avenues of inquiry: 1) vaccine against gonococci, 2) rapid reliable identification of both active disease and the carrier state versus simple past exposure, 3) bacterial competitive inhibition utilizing bacteriocins, 4) intravaginal chemoprophylaxis, 5) self-screening methods, 6) mass treatments, 7) epidemiologic treatment, and 8) oral prophylaxis. A very brief description of each of these areas of work will be given and some of the inherent problems in each will be discussed.

1) Gonococcal Vaccine

This, obviously, would be the easiest (though not entirely without its problems) answer to gonorrhea control. It is probable that with a large fraction of the at-risk population mounting an effective immunity, simple therapy of symptomatic cases and contact tracing would eradicate the disease or severely curb it. There is a large amount of current literature dealing with development of vaccine,^{3,4} but there has been little or no positive result therefrom until quite recently. The most vexing and fundamental problem to the research is well presented by Kearns⁵; it is possible to detect in males (with uncomplicated gonorrhea) immune lymphocytes, and both serum and secretory antigenococcal antibodies. It is further possible to demonstrate increasing immune response (all types) with increasing numbers of infectious episodes in the individual patient. Yet, no clear immunity to recurrent disease seems conferred by these mechanisms.

Perhaps the most hopeful news comes from Kwapinski's lab in Canada.⁶ It is postulated

†From the Lexington-Fayette County Health Department and the Department of Community Medicine, University of Kentucky Medical Center, Lexington.
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that a potent immunogen in the inner content of the bacterium has been masked in all previous work by polymerizing with a non-immunogenic lipoprotein toxic component of the cell. The immunogen has been separated from its masking component and partially characterized.

Certainly, if this postulate is correct this could well represent the breakthrough so long sought in vaccine research. The only problem will be related to the duration for which the protective response is adequate and the sociological problem of how and to whom the vaccine should be administered.

More typical of the vaccine research elsewhere is the work of Greenberg.⁷ That group has recently been testing the more traditional laboratory vaccine product in clinical field trials in humans; it will produce antibodies of **possible** significance in over 90% of vaccinees. Its value in gonorrhea prevention is yet to be established.

2) Rapid Reliable Identification of Both Active Disease and Carrier State

As many workers have pointed out, it is in this arena that syphilis was at last brought under control, and a similar story might be written for gonorrhea if the test were available. Norins presents a cogent analysis of the need for a gonococcal serologic test.⁸ The principal problem here is intimately tied into the area of research discussed above. The serologic test would depend almost solely upon a further explication of gonococcal immunobiology, probably just the type of work done in the vaccine-developing labs. Thus there is obvious hesitancy on the part of researchers to embark on work which depends upon non-existent basic research information—the discovery of which may even preclude the usefulness of their line of investigation (since it is likely that were that much known of the gonococcal immunobiology, a vaccine might be already produced).

3) Bacterial Competitive Inhibition by Bacteriocins

Volk reported an instance⁹ where an asymptomatic (and therefore presumably non-deleterious) colonization of the male urethra by a serogroup B meningococcus had a seeming protective effect upon the carrier even through many exposures to a quite virulent (subsequently proved) strain of *N. gonorrhoeae* in his consort.

The meningococcal strain was cultured and ultimately demonstrated to produce a potent bacteriocin against virulent gonococci.

This is perhaps the first area of research which explores an approach which would not require any more cooperation on the part of the patient than coming to the doctor for a pelvic examination; at that time he could inoculate the patient with an appropriate organism and thereby remove another potential perpetuator of virulent gonococci from the population. This method is also attractive because a significant fraction of the population at risk at one time or another does seek pelvic examination from the medical community, frequently for the purpose of acquiring means of birth control.

The biggest problems associated with this approach reside in 1) the requisite proofs that the strains of organisms proposed in the inocula do not in fact cause any kind of disease in the female reproductive tract, and 2) means for monitoring the patients' loss of the colony of desirable organisms. Also, since this method would depend on relatively delicate intravaginal ecological balance for survival of the desired colonization, there would undoubtedly be a significant segment of the inoculated population unprotected at any given time. The conclusion, then, is that though this might be an auxiliary aid in gonorrhea control, it does not fit the requirements for the mainstay of a program.

4) Intravaginal Chemoprophylaxis

Though there are several different specific agents under investigation for use as intravaginal prophylactics¹⁰⁻¹³ (most of which are also spermicidal and therefore of use as contraceptive agents) they are all similar in that instillation immediately prior to intercourse is necessary. Therein lies the greatest criticism of this approach (and most of the other research areas discussed, with the possible exceptions of numbers one and three above). It has been observed that a successful prevention program must be outside the control of those being protected.¹⁴

However, it is under the banner of intravaginal chemoprophylaxis that perhaps the best qualitative work has been done in assessing the overall effects of attacking the female reservoir of infection in gonorrhea control efforts. The whole area of dynamic modeling theory and epidemiologic statements made in biomathematic lan-

guage is fascinating, and can certainly provide insight into the rationality (or lack thereof) of the various facets of a total program to control a communicable disease. Lee presents a simple but useful mathematical model¹⁵ of gonorrheal transmission which allows prediction of the rate and nature of change in the patterns of incidence and prevalence of the disease given any intra-vaginal prophylactic method and a stated percentage efficacy and percentage usage rate.

The model calculates that gonorrhea would be eliminated at the end of five years if prophylaxis were used on 20% of all intercourses, a striking result! This model would seem to provide good evidence for basing programs of gonorrheal eradication on maneuvers directed toward the pool of female gonococcal transmitters.

5) Self-Screening Methods

In line with the above discussions of the importance of attacking the female infection pool this work holds particular promise. Recent demographic analyses of the segments of population harboring high rates of infection have shown that there is a particularly high case rate in the 10 to 19-year-old age group.¹⁶ This high rate assumes even greater significance when examined for the fraction of cases which are likely to get into the health care delivery system. There are several postulated reasons for this low utilization rate of medical resources directed toward venereal disease control, but one of the most persuasive is the ignorance of most teenagers and adolescents concerning their rights to medical evaluation and treatment without parental knowledge or consent. There are additional problems of acceptance of aggressive V.D. education programs by those in authority within the school system. Thus, we have a particularly hard-to-reach population with a large reservoir of endemic gonorrhea.

Addressing this problem, Barret-Connor has initiated trials of a method of self-screening for gonorrhea¹⁷ which requires neither direct medical supervision nor a pelvic examination. This technique is quite appropriate for the apprehensive, moderately well-informed school girl who is hesitant to take overt action in seeking medical evaluation, a situation which describes a relatively large proportion of the target population. Results of this study were most encouraging; except in a couple of instances of overgrowth of the cul-

tures by normal flora, there was virtually 100% concordance rate between positive cultures obtained by pelvic examination and those cultures obtained by patients in the age group 18 years and under. In the trial group over age 18 years the reliability of patient-obtained material fell to around 60%. Changes in the size of the vaginal vault with increasing numbers of years of sexual activity was postulated as a cause for this difficulty.

6) Mass Treatments

There is not a wide research experience with mass treatment campaigns. However, investigators in Greenland (where in some regions the prevalence of gonorrhea approaches one quarter of the population!) have conducted several such campaigns and provide us with several important conclusions should we ever be pushed to that extreme measure.

The report of Olsen¹⁸ is without details of the mechanisms employed to institute a mass treatment campaign. Two campaigns were carried out on geographically separated but analogous populations with the only variable being an active mobile unit for the examination of treated persons and a team for the tracing of contacts. The overall results of the campaign with the examination and contact-tracing teams were far superior to the program without these adjuncts. When the numbers were in, the most effective campaigns effected an 80% reduction in the incidence of the disease over time periods calculated to lead to a 41% increase in incidence had there been no treatment. Olsen emphasizes the necessity of timing and unification of effort over the broadest possible geographic area for significant success.

One of the most frequently raised objections to mass treatment is the effect of such maneuvers on the disposition of the organisms to succumb to reasonable antibiotic therapy. It is said that mass treatment would invariably lead to increased prevalence of antibiotic-resistant strains. A striking finding of the Greenland experience is that antibiotic sensitivities of *N. gonorrhoeae* isolated during the campaigns actually increased, rather than the reverse. Olsen offers no hypotheses to explain this finding, but it is certainly a foot in the door for those who advocate this type of approach to the eradication of gonorrhea.

7) Epidemiologic Treatment

There is currently no research being pursued to determine the value of epidemiologic treatment in a particular program of gonorrhea control. It is generally accepted as reasonable and prudent medical practice to dispense epidemiologic treatment to nominated contacts of known cases. However, for those practitioners yet feeling uncomfortable with treating undiagnosed disease, it should be pointed out that studies indicate it is frequently necessary to obtain up to eight cultures of infected females before cultures will indicate infection.¹⁹ Thus it is particularly important that epidemiological treatment not be withheld from females whose consorts' cases cannot be documented by the examining physician. On the other hand, it is not recommended that the physician treat applicants without an examination, and it is similarly frowned upon for the treatment to be dispensed to those patients who have merely had intercourse with a partner whose venereal disease status is unknown.

8) Oral Prophylaxis

When one speaks of oral prophylaxis, one usually means administration of antibiotic either shortly before an intended exposure or shortly after intercourse with a partner whose venereal status is unknown. There has been no recent research carried out on this question, but some very good studies were done by the military in the late 1940's and early 1950's.²⁰ The results of this work were essentially as follows: 1) penicillin, per os, 250,000 u, administered within a few hours of exposure was virtually 100% effective in preventing gonorrhea, 2) there was no indication that this regimen altered or masked the evolution of primary or secondary syphilitic lesions in those whom it failed to protect, 3) there were very few sensitivity reactions; most of those occurring were mild and followed the ingestion of the first tablet, indicating prior sensitization. Almost all severe reactions were related to parenteral drug administration.

The weightiest objections to programs proposing oral antibiotic prophylaxis today center around the problems of antibiotic resistant organisms in the general population. First, one could easily envision that in the civilian population, when prophylaxis failures occur, patients

would undertake self-treatment of advanced infections. The self-treatment would most likely be under-treatment, and, in this sort of a milieu, the emergence of ever-more antibiotic-resistant organisms is enhanced. Second, since the military studies were done, minimum inhibitory concentrations of penicillin for most of the prevalent strains of gonococci today have increased ten to one-hundred fold²¹, practically necessitating what would have been a full treatment regimen for a developed case in 1950 in order to achieve any measure of prophylaxis for today.

Of course, the other great obstacle to any unsupervised antibiotic regimen is the relatively high frequency of serious anaphylactoid reactions to drug. There is simply no convenient method for dealing with this problem.

Thus, we are brought to the end of the catalogue of current research directions in gonorrhea. It is apparent that a breakthrough may be just around the corner or it may be years away. Nevertheless, we must respond to the challenge of gonorrhea today, working with what we have; for anything that we fail to do today will haunt us tomorrow.

Proposed Activities

It should be stated at the outset that none of the current activities in the gonorrhea control program are to be faulted; they are all worthy and appropriate maneuvers. However, they simply aren't supplemented as fully by additional activities as they should be.

Arguments justifying higher costs for expanding government programs are regarded with jaundiced eyes in the current economic climate; however, a recent analysis²¹ of the total economic burden placed on our society by gonorrheal pelvic inflammatory disease alone reveals incredibly high costs. Costs projected at the end of five more years (if there is no dramatic reversal of the geometrically climbing case rate) are even more remarkable. And these projections do not take into account research which indicates that the costs of treating PID are rapidly shifting from cost-of-outpatient-treatment to cost-of-inpatient-treatment (which is 20 to 40 times as expensive!) due to the increasing percentage of all PID cases caused by gonococci that are relatively antibiotic-resistant.²² Thus, there exist compelling reasons for investing greater resources in gonorrhea control.

The proposed additional gonorrhea control measures are:

I. Increased education and screening of high-risk population groups.

A. High school groups

- 1) By utilization of senior medical students for delivering talks and teaching sessions in the schools.
- 2) By emphasizing venereal disease prevention in all physical education programs, (perhaps implementing self-screening programs as discussed in this paper).

B. Homosexual community

Since this is one of the major sources of gonorrhea problems, special efforts should be made to reach this group with outreach programs.

C. Young women

Special emphasis needs to be placed to increase screening of women at their annual check-up. Transgrow Pick-Up services is provided by certain local health departments. Lab work is completed and results tabulated for the physicians at the health department. This program can have significant impact on reducing the pool of asymptomatic infected females. Increased physician participation in this program should be encouraged.

II. Adopting project PROTECT as discussed below.

The Virginia Medical Association first instituted a program known by the acronym PROTECT.²³ For the physician the letters mean Physicians' Referral Option To Encourage Contact Treatment. To patients, it means Please Remember Others; Tell Every Contact Today. Every physician likely to see gonorrhea patients is supplied small cards with the acronym printed on them. Whenever a physician treats a case of gonorrhea, he gives the patient several cards and requests the patient to distribute them to every contact the patient can reach. If the patient and physician desire, they can decide on where the contacts are to be referred and the physician can scribble the location and hours of the referral site on the obverse of the card. Any physician or treatment center presented a card by a patient then offers epidemiologic treatment to the cardholder with no questions asked; since cards are only distributed by physicians, their possession by patients is essentially a documentation of expo-

sure to a medically diagnosed case. The cardholder thus treated is then supplied with cards for his contacts, and the process continues.

Although this project has not yet begun its evaluation phase, it certainly seems a reasonable and appropriate component of any well-constructed program, especially as it offers so much more anonymity in contact tracing. There is built into the system some opportunity for audit simply by collecting the cards periodically and subjecting them to analysis. Also, some idea of the number of untreated cases in a community may be obtained simply by counting the number of cards presented during one month or year and subtracting that from the number given out during the same period. Of course this assumes that all cards taken out are delivered, but even with this weakness a better idea might be gained than is possible with our present system, whose estimates are based on far more than one assumption.

Conclusion

The prospects for eventual control of gonorrhea depends on the amount of effort we are willing to devote to it. Current efforts need to be augmented by increased involvement of the public and private sectors of medicine. We cannot afford to wait until there is some kind of scientific breakthrough or relax our efforts everytime there is a temporary drop in the incidence of the disease.

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References

1. Henderson, R. H., Venereal Disease — A National Health Problem, *Clin. Obstet. & Gynecol.* 18(1):223-32 Mar. 1975.
2. U.S. Dept. of Health, Education and Welfare; Public Health Service, *Reported Morbidity and Mortality in the United States 1974* 23(53) DHEW (CDC) publ #76-8241, July 15, 1975.
3. Bisno, A. L., Human Immunity in Gonorrhea, *J. Lab. Clin. Med.* 86(2):221-9 Aug. 1975.
4. Casper, W. A., Eradication of Gonorrhea by Immunization, *Int'l. J. Derm.* 13:29-31, Jan-Feb 1974.
5. Kearns, D. H., Paradox of the Immune Response in Gonorrhea, *NEJM* 289:1170-7, 1973.
6. Kwapinski, J. B., Preliminary Observations on the Protective Activity of a Cytoplasmic Immunogen of N. Gonorrhea, *Can. J. Microbiol.* 21(3):332-7, Mar. 1975.
7. Greenburg, L., Field Trials of a Gonococcal Vaccine, *J. Reprod. Med.* 14(1): 34-6, Jan. 1975.
8. Norins, L. C., The Case for Gonococcal Serology, *J. Infect. Dis.* 130(6):677-9, Dec. 1974.

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Gastric Effects of Propoxyphene, Acetaminophen, Indomethacin, Phenylbutazone, and Naproxen†

N. S. MANN, M.D. and A. J. SACHDEV, M.D.

Louisville, Kentucky

Indomethacin, phenylbutazone, and naproxen when given by esophageal intubation to rats produced acute gastric erosions. Naproxen produced significantly fewer erosions as compared to indomethacin or phenylbutazone. Propoxyphene and acetaminophen caused no gastric erosions in this experimental model.

THE therapeutic efficacy of acetylsalicylic acid as an anti-inflammatory and analgesic agent is often limited by gastric intolerance and gastric bleeding.^{1,2} Indomethacin and phenylbutazone also cause acute gastric erosions and gastrointestinal bleeding.^{3,4} Some of these agents cause gastric damage by destroying the gastric mucosal barrier and allowing back diffusion of H^+ .^{5,6} Propoxyphene and acetaminophen have no significant gastric effects; however, they are not anti-inflammatory agents and are relatively weak analgesics. Naproxen, also known as naprosyn, is d-2 (6 methoxy-2-naphthyl) propionic acid and is as effective as aspirin in the treatment of rheumatoid arthritis⁷; like aspirin it also inhibits prostaglandin synthesis.⁸ It has less gastric toxicity as compared to aspirin, although massive gastric bleeding has occurred after its use.⁹ We wanted to compare the effects of naproxen with propoxyphene, acetaminophen, indomethacin, and phenylbutazone on the rat gastric mucosa.

Methods

Male albino rats weighing 150-200 gm. were fasted overnight. Various drugs suspended in 1% methyl cellulose were given by esophageal intubation. The dosage given is shown in Table 1. The

drugs were given in four equally divided doses one hour apart. Animals receiving 1% methyl cellulose alone served as controls. One hour after the last dose, the rats were sacrificed with ether.

The abdomen was opened by a midline incision and the stomach was removed. The stomach was cut open along the greater curvature and the number of erosions were counted. The specimens were fixed in 5% formalin and microscopic sections from selected areas were stained with hematoxylin and eosin and studied with light microscope. Student's t-test was performed for statistical analysis.¹⁰

Results

Naproxen, indomethacin, and phenylbutazone produced acute erosive gastritis in rats (Figure 1). On microscopic examination, superficial mu-



FIG. 1 Stomach of a Group IV rat showing acute erosions and bleeding.

†From the Medical Service, Digestive Diseases (Gastroenterology) Section, Veterans Administration Hospital and University of Louisville School of Medicine, Louisville. Supported by V. A. Research Service.

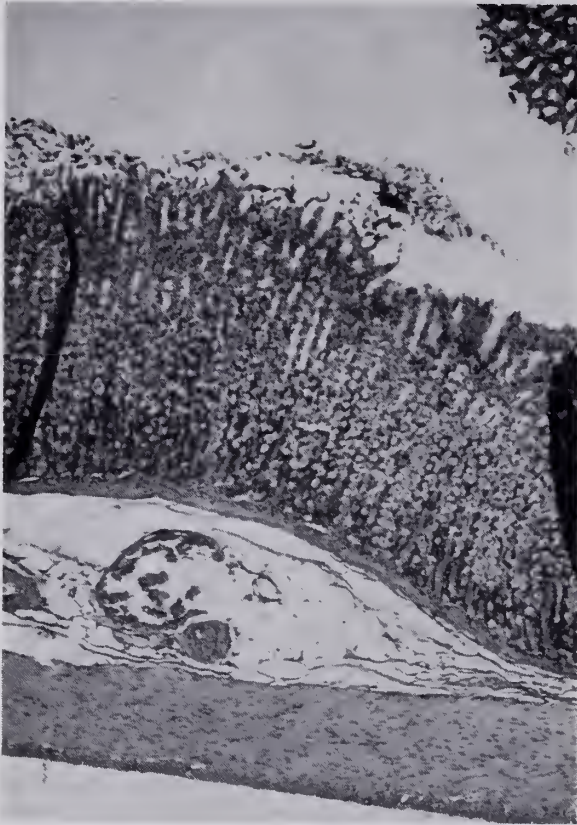


FIG. 2 Section of a Group IV rat stomach showing superficial mucosal necrosis and submucosal congestion. H&E X65

cosal necrosis and submucosal congestion was seen (Figure 2). There was no qualitative difference in the gastric lesion produced by these drugs. Naproxen caused a significantly less number of gastric erosions as compared to indomethacin and phenylbutazone ($p < .001$). Phenylbutazone was more injurious than indomethacin ($p < .01$). Propoxyphene and acetaminophen did not cause any gastric erosions in this experimental model.

Discussion

Non-steroidal anti-inflammatory drugs are commonly used in arthritic diseases. Indomethacin and phenylbutazone, in addition to salicylates are the principal drugs available. However, both of them are known to cause gastric erosions and upper gastrointestinal bleeding in man and animals.¹¹⁻¹³ The mechanism of gastric injury by these drugs is not completely understood but they may produce their effects by inhibiting prostaglandin synthesis, or increased histamine formation or inhibition of gastric mucus secretion.¹³⁻¹⁹ Naproxen, a new anti-inflammatory drug, has been found to be useful in the treatment of rheuma-

Table 1
Effect of Drugs on Rat Gastric Mucosa
(10 Rats in each group)

| Test Material | Total No. of | |
|------------------------|--------------|-------------------|
| | Erosions | Mean \pm S.E.M. |
| 1% Methylcellulose | 0 | 0 |
| Naproxen 225mg/kg | 20 | 2.0 \pm .032 |
| Indomethacin 5 mg/kg | 50 | 5.0 \pm .241 |
| Phenylbutazone 10mg/kg | 90 | 9.0 \pm .322 |
| Propoxyphene 5mg/kg | 0 | 0 |
| Acetaminophen 225mg/kg | 0 | 0 |

toid arthritis and other inflammatory conditions.^{7,20} Like indomethacin and aspirin, it also inhibits prostaglandin synthesis.⁸ It reportedly has less gastric side effects^{7,20} than other anti-inflammatory drugs although massive upper gastrointestinal bleeding has been reported after its use.^{9,21,22} In the present study, it caused significantly fewer gastric erosions as compared to indomethacin and phenylbutazone but more erosions as compared to propoxyphene and acetaminophen. However, the latter two have no anti-inflammatory action and are milder analgesics.

Acknowledgements

We are grateful to Connie Meyers for excellent secretarial support, to Mr. V. Weis for expert technical assistance, to Mr. M. Howze for illustrations and to Syntex Labs, Inc., Palo Alto, Calif. for the gift of naproxen.

Nonproprietary Names and Trademarks of Drugs

Propoxyphene—*Darvon*
Acetaminophen—*Tylenol*
Indomethacin—*Indocin*
Phenylbutazone—*Butazolidin*
Naproxen—*Naprosyn*

References

1. Weiss, A., Pitman, E. P. and Graham, E. C., Aspirin and gastric bleeding. *Am. J. Med.* 31:266-278, 1961.
2. Thorsen, W. B., Western, D. and Tanaka, Y. et. al., Aspirin injury to the gastric mucosa. *Arch. Int. Med.* 121: 499-506, 1968.
3. Lovgren, O. and Allander, E., Side effects of indomethacin. *Br. Med. J.* 1:118, 1964.
4. Mauer, E. F., the toxic effects of phenylbutazone. *NEJM* 253:404-410, 1955.
5. Davenport, H. W., Gastric mucosal injury by fatty and acetylsalicylic acids. *Gastroenterology* 46:245-253, 1964.
6. Chvasta, T. E. and Cooke, A. R., The effect of several ulcerogenic drugs on the canine gastric mucosal barrier. *J. Lab. Clin. Med.* 79:302-315, 1972.
7. Bowers, D. E., Dyer, H. R. and Fosdick, W. M. et. al., Naproxen in rheumatoid arthritis. *Ann. Int. Med.* 83:470-475, 1975.
8. Takeguchi, C. and Sih, C. J., A rapid spectrophotometric assay for prostaglandin synthetase: Application to the study of non-steroidal anti-inflammatory agents. *Prostaglandins* 2: 169-184, 1972.
9. Hart, F. D., Naproxen and gastrointestinal hemorrhage. *Br. Med. J.* 2:51-52, 1974.

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GRAND ROUNDS



University of Kentucky College of Medicine

This Journal feature will be presented alternately by the University of Louisville and the University of Kentucky Departments of Medicine and Departments of Surgery. We hope to have these features revolve around subjects of immediate practical interests to the practicing physician; and, for those of us not able to attend grand rounds in the teaching centers as often as we might, we hope this will represent a bit of a refresher course.

Rocky Mountain Spotted Fever*

The diagnosis and management of Rocky Mountain spotted fever continues to pose a challenge to clinicians. In this Grand Rounds, a case of spotted fever is presented which illustrates some of the problems which may be encountered. In the case discussion, newer concepts concerning the epidemiology of spotted fever and its diagnosis and management are presented.

Introduction

The number of cases of spotted fever reported annually to the Center for Disease Control has increased almost fourfold during the past 15 years.¹ This dramatic increase in the incidence of the disease appears to be related to the fact that an increasingly large number of individuals are being exposed to ticks in housing developments which encroach on areas of tick habitat.² Because of these trends, it has become more important than ever for physicians to be able to recognize and treat spotted fever.

Case Report

On July 14, 1975, a 60-year-old farmer was transferred to the University of Kentucky Hospital because of the rapid development of azotemia. He was in excellent health until June 25, 1975, when he noted the sudden onset of myalgias, fever, chills, severe headache, and nausea. His symptoms progressed, and on July 4, 1975, he was hospitalized elsewhere. At that time, he was febrile and appeared confused. He had slight nuchal rigidity, but his physical examination was otherwise normal. The blood leukocyte count was 11,800/cu mm with a left

shift on the differential count. The hematocrit was 46%. Blood urea nitrogen was 24 mg%. A roentgenogram of the chest was normal.

On July 7 a rash developed over the extremities, and a history of exposure to ticks was elicited. Lumbar puncture yielded normal cerebrospinal fluid (CSF). Cultures of blood and CSF were sterile. A presumptive diagnosis of Rocky Mountain spotted fever was made, and tetracycline therapy was initiated. Serum titers of agglutinins to proteus OX-2 and OX-19 were negative on July 7, but the level of agglutinins rose progressively to a peak titer of 160 by July 11. The patient developed edema of the extremities, oliguria, and signs of renal failure. The blood urea nitrogen was 258 mg%, and the creatinine was 5.8 mg%. A Foley catheter was inserted, and acute urinary retention was documented. The patient was transferred to the University of Kentucky Hospital.

On admission, he was lethargic and appeared both acutely and chronically ill. His blood pressure was 140/82 mm of Hg, and his temperature was 98.6°F. orally. There was a maculopapular exanthem over the extremities and trunk, and on the palms and soles. There was pitting edema of the extremities, the back and the abdominal wall, and the genitalia were edematous. There was muscle tenderness in all extremities. The cardiovascular examination was normal. Auscultation of the chest revealed scattered rhonchi with decreased breath sounds over the left lower lobe. Rectal examination revealed an enlarged prostate, and the stool was guaiac-positive. Neurologic examination was normal, except that the patient was disoriented to time and place. The blood leukocyte count was 11,800 with a left shift, and the hematocrit was 40%. The platelet count was 144,000 initially, but it fell to 19,000 during

* From the Division of Infectious Diseases, Department of Medicine, University of Kentucky College of Medicine and Veterans Administration Hospital, Lexington

the first five days in the hospital. During this time clotting studies showed a prothrombin time of 16.5 sec. (11.9 sec. control), and a partial thromboplastin time of 41.6 sec. (30 sec. control). The fibrinogen was 60 mg% (normal range = 150-450 mg%). Other studies on admission included a urinalysis which was normal, and a roentgenogram of the chest which showed a normal heart size and a left pleural effusion. The electrocardiogram was normal.

Tetracycline therapy was discontinued, and the patient was given intravenous chloramphenicol, 1.0 g every eight hours. Within five days after cessation of tetracycline, and with adequate urinary drainage, the blood urea nitrogen fell to 24 mg%, with a serum creatinine of 0.9 mg%. The pleural effusion and peripheral edema resolved, and clotting studies normalized. Serum for studies of complement-fixing antibody to *Rickettsia rickettsiae* was submitted to State Health Department laboratories in Frankfort, Kentucky. An acute serum drawn July 8, 1975, and a convalescent serum drawn July 23, 1975, both had antibody titers of less than 1:8.

Epidemiology

Spotted fever rickettsiae are maintained in nature in ticks, and in the Southeast, the dog tick is the most important reservoir. Infection of man correlates with periods of peak tick activity, and cases of spotted fever rarely occur before April or after October. Approximately 80% of patients with spotted fever have a history of exposure to ticks. Rickettsiae may gain entry into the host following a tick bite or, if the tick is crushed on the skin, they may enter through abrasions. Fortunately, only a small percentage of ticks (usually less than 5%) in a given locale carry rickettsiae, and most instances of tick exposure do not result in infection.

Linnemann et al² have carried out some interesting studies of an endemic focus of spotted fever in Clermont County, Ohio, near Cincinnati. Their findings indicate that the recent increase in the incidence of spotted fever may be due to the development of new residential areas in suburbs near areas of tick habitat. In general, the individuals who are infected are children under 15 years of age, with an equal distribution between the sexes.³ Of course, individuals in any age group may acquire spotted fever, as our case report illustrates.

There is now evidence that some infections

which appear to be spotted fever by clinical criteria are actually due to a rickettsia that has been identified only recently. This organism, *Rickettsia canada*, produces a clinical illness indistinguishable from spotted fever, and it also causes a rise in the proteus agglutinins. However, *R. canada* does not cause a rise in complement-fixing antibodies to *Rickettsia rickettsiae*, the classic etiologic agent of spotted fever. There are now several documented cases of *R. canada* infection in the United States.^{4,5} The case presented above could, conceivably, have represented infection by *R. canada*. The patient's clinical illness was very suggestive of spotted fever, and he had a fourfold rise in proteus OX-2 and OX-19 agglutinins, but did not develop complement-fixing antibody to *R. rickettsiae*. The distinction may be academic, since the approach to therapy in infections due to *R. canada* is the same as for infections due to *R. rickettsiae*, insofar as is known.

Pathophysiology

Rickettsiae resemble bacteria in most respects, but they are obligate intracellular organisms, as are viruses. During infection in man, rickettsiae grow and proliferate in the vascular endothelium of small vessels, and they produce widespread endothelial swelling and degeneration.³ The inflammatory reaction is marked by perivascular mononuclear cuffing and, frequently, by intravascular thrombosis. It is easy to visualize how this process, which is a diffuse one, can cause the cutaneous lesions and visceral disturbances which characterize spotted fever. Endothelial damage may also account for the development of dependent edema of the soft tissues, which is a common manifestation of the disease. A less well appreciated concomitant of the endothelial damage is the development of moderate to severe thrombocytopenia, as was observed in the patient presented above. The pathogenesis of the thrombocytopenia of spotted fever is not clear. It may be due to platelet clumping associated with vasculitis, and to the development of disseminated intravascular coagulation.⁶ Thrombocytopenia has been found in a majority of patients with spotted fever who have had platelet counts performed. For example, in one series, 21 of 29 patients with spotted fever had reduced platelets.⁷ The counts in the patients with reduced platelets ranged from 7,000 to 105,000/cu mm, and it was less than 40,000/cu mm in a ma-

jority of the cases. The presence of abnormalities in other coagulation determinants, including fibrinogen, prothrombin, and factors V and VIII, have been reported.^{4,8,9} Our patient also had evidence of abnormalities of multiple coagulation factors. However, others¹⁰ have failed to find evidence of consumptive coagulopathy in spotted fever and the overall incidence of coagulation abnormalities is not known.

Despite the severity of clinical illness in spotted fever, and the profound pathophysiologic changes which may take place, there are surprisingly few residua in patients who survive the infection. Minor residual impairment of brain function has been noted,¹¹ and convalescence may be prolonged when treatment is given only late in the course of the disease. Even so, it is often striking how rapidly specific therapy can eliminate the acute toxicity of the infection and lead to a subjective sense of improvement. In fact, when the constitutional signs of infection are not greatly reduced within 3-4 days after the onset of specific therapy, the possibility of an error in diagnosis must be considered.

Table 1

PRESUMPTIVE DIAGNOSIS OF SPOTTED FEVER

Proper Season—Spring and Summer

History of Tick Exposure

Symptoms of Severe Headache, High Fever and Myalgia

Characteristic Rash

Normal or Low Blood Leukocytes

Diagnosis

A recent survey made by Torres and his associates⁵ revealed that the average patient with spotted fever has symptoms for 10.6 days before specific therapy is initiated. Undoubtedly, one of the reasons that treatment is often delayed to this extent is that many physicians have difficulty in making the diagnosis. This is not surprising since few physicians have the opportunity to gain a large experience with the disease. Most patients with spotted fever follow a "classic" pattern of presentation, but the early symptoms are rather non-specific.

There are several important points to consider in making a presumptive diagnosis of spotted fever (Table 1). Symptoms usually appear abruptly about one week after exposure to ticks. Severe headache is one of the earliest and most prominent symptoms of the disease. The headache may be associated with meningismus, and the spinal fluid protein can be elevated, but there

Table 2

TREATMENT OF SPOTTED FEVER

Drugs of Choice: Chloramphenicol or Tetracycline

Route: I.V. or Oral; The I.M. Route is undesirable

Indications: For Active Disease, Not For Prophylaxis

Avoid: Penicillins and Cephalosporins (which are inactive) or Sulfa (which may worsen the infection)

are seldom more than a few lymphocytes in the fluid. The development of rash is the earliest specific manifestation of the infection. The rash appears about the fourth day of illness on the wrists, ankles, soles, and palms and is erythematous and macular in appearance. After two to three days, the rash becomes generalized. At first it is maculopapular, and several days later it becomes petechial in character. Ecchymoses develop late in the course of the infection. The blood leukocyte count is usually near-normal, and this finding may be of help in excluding a pyogenic process. Proteus agglutinins and complement-fixing antibodies develop relatively late in the disease and are of no value in early diagnosis.

Spotted fever is easily confused with a variety of infections of bacterial or viral etiology, unless one is familiar with the rather unique character of the rash and the relatively slow progression of the clinical course in spotted fever. For example, in meningococcemia the clinical course is usually much more rapid than it is in spotted fever. Only a few infectious diseases besides spotted fever can cause lesions on the soles and palms (e.g. syphilis and gonococcemia), and the hemorrhagic nature of the cutaneous lesions of spotted fever is useful in excluding many of the common viral exanthems.

Management

Spotted fever is an eminently treatable disease. Guidelines for antibiotic treatment are given in Table 2. For adults, chloramphenicol or tetracycline in a dose of 0.5 gm every six hours is adequate. There is little experience with the newer tetracyclines in the treatment of spotted fever. Where there is an element of renal failure, as in the case presented above, chloramphenicol is the drug of choice. Children can be treated with chloramphenicol, 75 mg/kg body weight per day in divided doses, or in the case of older children with normal renal function, tetracycline hydrochloride can be given in a dose of 25 mg/kg body weight per day in divided doses. Tetracycline may be preferable to chloramphenicol in

the presence of severe thrombocytopenia if renal function is normal.

Oral therapy is effective in the early stages of infection, if the patient can be relied upon to take medication. Otherwise, the intravenous route should be used. Intramuscular therapy is undesirable because of the frequent occurrence of thrombocytopenia and a hemorrhagic tendency in spotted fever. Also, chloramphenicol succinate is poorly absorbed after intramuscular administration.¹² It must be emphasized that penicillins and cephalosporins are **inactive** in spotted fever. Curiously, sulfa may actually worsen the infection, perhaps by competing with paraaminobenzoic acid which is rickettsiostatic.³

Survival in many cases will depend ultimately on the provision of good supportive care and on the maintenance of fluid and electrolyte balance. Overhydration must be prevented since there is a great tendency for fluid to accumulate in extravascular sites. Coagulation disturbances should probably not be treated unless they are severe, i.e. there is significant bleeding. In those rare instances, heparin therapy may be indicated.⁵

Table 3

PROPHYLACTIC MEASURES FOR SPOTTED FEVER

1. **Contacts of Clinical Cases—Observe**
2. **Tick Bite—Remove Tick with Tweezers and Observe**
3. **Frequent Tick Exposure—Vaccinate**

Prophylactic measures for spotted fever are listed in Table 3. Only individuals with evident disease require antibiotic treatment. Direct man-to-man spread of the infection does not occur, and overall, very few patients with a history of tick exposure will develop spotted fever. There is some evidence that rickettsial infections cannot be prevented by short courses of "prophylactic" antibiotics, when these are given during the latent phase of infection. Since spotted fever is characterized by a slowly progressive course, it is

sufficient to ask persons with tick-exposure to report at once to a physician should they develop fever or headache. Individuals with chronic occupational exposure to ticks should probably be vaccinated, although the efficacy of existing vaccines has not been fully proven.¹³

J. DONALD COONROD, M.D.
ROBERT M. COOPER, M.D.

References

1. Sencer, D. J., Brachman, P. S., Cohen, P., Steele, H. R., Spoon, M. M., Moore, G. S., Turner, C. C., Wilson, F. H. and Porcher, F. H., Reported morbidity and mortality in the United States 1974. *Morbidity and Mortality Weekly Report* 23, No. 53:51, 1974.
2. Linneman, C. C. Jr., Jensen, P. and Schiff, G. M., Rocky Mountain spotted fever in Clermont County, Ohio. *Amer. J. Epidemiol.* 97:125, 1973.
3. Woodward, T. E. and Jackson, E. B., Spotted fever rickettsiae. In *Viral and Rickettsial Infections of Man*, eds. Horsfall, F. L. and Tamm, I., 4th ed. Philadelphia, J. B. Lippincott Co., 1965, pp. 1095-1129.
4. Bozeman, F. M., Elisberg, B. L., Humphries, J. W., Runcik, K. and Palmer, D. B. Jr., Serologic evidence of *Rickettsia canada* infection of man. *J. Infect. Dis.* 121:367, 1970.
5. Torres, J., Humphreys, E. and Bisno, A. L., Rocky Mountain spotted fever in the Mid-South. *Arch. Intern. Med.* 132:340, 1973.
6. Unsigned editorial. Thrombocytopenia in Rocky Mountain spotted fever. *JAMA* 205:105, 1968.
7. Rubio, T., Riley, H. D., Nida, J. R., Brooksaler, F. and Nelson J. D., Thrombocytopenia in Rocky Mountain spotted fever. *Amer. J. Dis. Child.* 116:88 1968.
8. Trigg, J. W. Jr., Hypofibrinogenemia in Rocky Mountain spotted fever: Report of a case. *New Eng. J. Med.* 270:1042, 1964.
9. Atkin, M. D., Strauss, H. S. and Fisher, G. U., A case report of "Cape Cod" Rocky Mountain spotted fever with multiple coagulation disturbances. *Pediatrics* 36:627, 1965.
10. Feigin, R. D. and Kissane, J. M., Rocky Mountain spotted fever: Successful application of new insights into physiologic changes during acute infections to successful management of a severely-ill patient. *Clin. Ped.* 8:331, 1969.
11. Woodward, T. E. and Smadel, J. E., Rocky Mountain spotted fever. In *Principles of Internal Medicine*, eds. Harrison, T. R. Adams, R. D., Bennett, I. L. Jr., Resnick, W. H., Thorn, G. W. and Winthrobe, M. M., 3rd ed. New York, McGraw Hill Book Co., Inc., 1958, pp. 1025-1031.
12. DuPont, H. L., Hornick R. B., Weiss, C. F., Snyder, M. J. and Woodward, T. E., Evaluation of chloramphenicol acid succinate therapy of induced typhoid fever and Rocky Mountain spotted fever. *New Eng. J. Med.* 282:53, 1970.
13. Calia, F. M., Bartelloni, P. J. and McKinney, R. W., Rocky Mountain spotted fever: Laboratory infection in a vaccinated individual. *JAMA* 211:2012, 1970.

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I N G I S

A S P R E C I O U S

A S S I G H T H A V E

Y O U H A D Y O U R H E A R I N G

T E S T E D L A T E L Y A S I M I L A R

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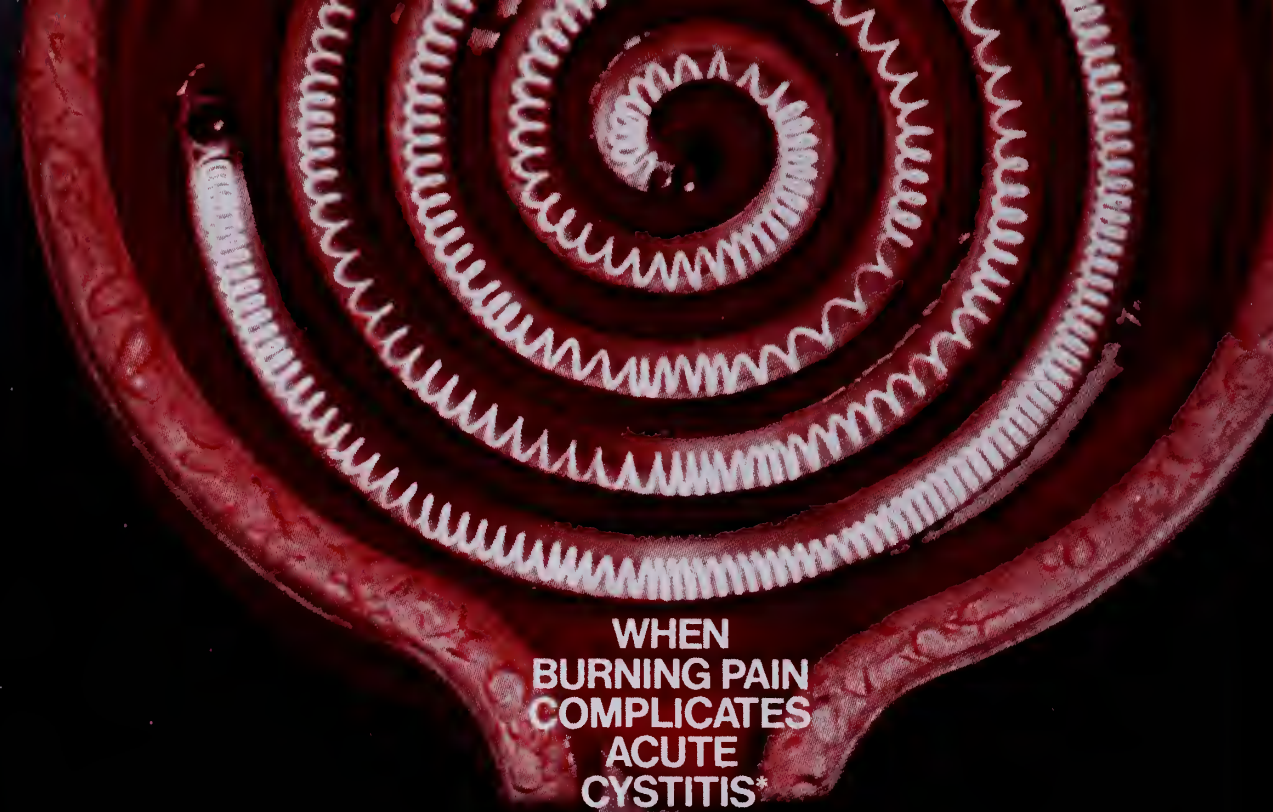
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Indications: In adults, urinary tract infections complicated by pain (primarily pyelonephritis, pyelitis and cystitis) due to susceptible organisms (usually *E. coli*, *Klebsiella-Aerobacter*, *Staphylococcus aureus*, *Proteus mirabilis*, and, less frequently, *Proteus vulgaris*) in the absence of obstructive uropathy or foreign bodies.

Note: Carefully coordinate *in vitro* sulfonamide sensitivity tests with bacteriologic and clinical response; add aminobenzoic acid to follow-up culture media. The increasing frequency of resistant organisms limits the usefulness of antibacterials including sulfonamides. Measure sulfonamide blood levels as variations may occur; 20 mg/100 ml should be maximum total level.

Contraindications: Children below age 12; sulfonamide hypersensitivity; pregnancy at term and during nursing period; because Azo Gantanol contains phenazopyridine hydrochloride it is contraindicated in glomerulonephritis, severe hepatitis, uremia, and pyelonephritis of pregnancy with G.I. disturbances.

Warnings: Safety during pregnancy not established. Deaths from hypersensitivity reactions, agranulocytosis, aplastic anemia and other blood dyscrasias have been reported and early clinical signs (sore throat, fever, pallor, purpura or jaundice) may indicate serious blood disorders. Frequent CBC and urinalysis with microscopic examination are recommended during sulfonamide therapy.

Precautions: Use cautiously in patients with impaired renal or hepatic function, severe allergy, bronchial asthma; in glucose-6-phosphate dehydrogenase-deficient individuals in whom dose-related hemolysis may occur. Maintain adequate fluid intake to prevent crystalluria and stone formation.

Adverse Reactions: Blood dyscrasias (agranulocytosis, aplastic anemia, thrombocytopenia, leukopenia, hemolytic anemia, purpura,

FOR THE PATHOGENS

- Effectively controls susceptible pathogens such as *E. coli*, *Klebsiella-Aerobacter*, *Staph. aureus*, *Proteus mirabilis* and, less frequently, *Proteus vulgaris*.

*nonobstructed, due to susceptible organisms

hypoprothrombinemia and methemoglobinemia); **allergic reactions** (erythema multiforme, skin eruptions, Stevens-Johnson syndrome, epidermal necrolysis, urticaria, serum sickness, pruritus, exfoliative dermatitis, anaphylactoid reactions, periorbital edema, conjunctival and scleral injection, photosensitization, arthralgia and allergic myocarditis); **G.I. reactions** (nausea, emesis, abdominal pains, hepatitis, diarrhea, anorexia, pancreatitis and stomatitis); **CNS reactions** (headache, peripheral neuritis, mental depression, convulsions, ataxia, hallucinations, tinnitus, vertigo and insomnia); **miscellaneous reactions** (drug fever, chills, toxic nephrosis with oliguria and anuria, periarteritis nodosa and L. E. phenomenon). Due to certain chemical similarities with some goitrogens, diuretics (acetazolamide, thiazides) and oral hypoglycemic agents, sulfonamides have caused rare instances of goiter production, diuresis and hypoglycemia. Cross-sensitivity with these agents may exist.

Dosage: Azo Gantanol is intended for the acute, painful phase of urinary tract infections. **Usual adult dosage:** 2 Gm (4 tabs) initially, then 1 Gm (2 tabs) B.I.D. for up to 3 days. If pain persists, causes other than infection should be sought. After relief of pain has been obtained, continued treatment with Gantanol (sulfamethoxazole) may be considered.

NOTE: Patients should be told that the orange-red dye (phenazopyridine HCl) will color the urine

Supplied: Tablets, red, film-coated, each containing 0.5 Gm sulfamethoxazole and 100 mg phenazopyridine HCl—bottles of 100 and 500

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WARNING

This fixed combination drug is not indicated for initial therapy of edema or hypertension. Edema or hypertension requires therapy titrated to the individual patient. If the fixed combination represents the dosage so determined, its use may be more convenient in patient management. The treatment of hypertension and edema is not static, but must be reevaluated as conditions in each patient warrant.

Indications: When the fixed combination represents the dosage determined by titration: Adjunctive therapy in edema associated with congestive heart failure, hepatic cirrhosis, the nephrotic syndrome. Corticosteroid and estrogen-induced edema, idiopathic edema; hypertension, when the potassium-sparing action of its 'Dyrenium' component is warranted.

Contraindications: Further use in progressive renal or hepatic dysfunction; hyperkalemia. Preexisting elevated serum potassium. Hypersensitivity to either component or other sulfonamide-derived drugs. Routine use of diuretics in otherwise healthy pregnancy.

Warnings: Do not use potassium supplements, dietary or otherwise, unless hypokalemia develops or dietary intake of potassium is markedly impaired. If supplementary potassium is needed, potassium tablets should not be used. Hyperkalemia can occur, and has been associated with

cardiac irregularities. It is more likely in severely ill patients with urine volume less than one liter/day, the elderly or diabetics, with suspected or confirmed renal insufficiency. Periodic determinations of serum K^+ should be made. If hyperkalemia develops, substitute a thiazide alone, restrict K^+ intake. The presence of a widened QRS complex or arrhythmia in association with hyperkalemia requires prompt additional therapy. Thiazides are reported to cross the placental barrier and appear in breast milk; fetal or neonatal hyperbilirubinemia, thrombocytopenia, altered carbohydrate metabolism and other adverse reactions that have occurred in the adult may result. When used in pregnancy or in women who might bear children, weigh potential benefits against possible hazards to fetus. Adequate information on use in children is not available.

Precautions: Do periodic serum electrolyte determinations (particularly important in patients vomiting excessively or receiving parenteral fluids). Periodic BUN and serum creatinine determinations should be made, especially in the elderly, diabetics, or those with suspected or confirmed renal insufficiency. Watch for signs of impending coma in severe liver disease. If spiro-lactone is used concomitantly, determine serum K^+ frequently; both can cause K^+ retention and elevated serum K^+ . Two deaths have been reported with such concomitant therapy (in one, recommended dosage was exceeded, in the other serum electrolytes were not properly monitored). Observe regularly for possible blood dyscrasias, liver damage, other idiosyncratic reactions. Blood dyscrasias have been reported in patients receiving Dyrenium® (triamterene, SK&F Co.), and

leukopenia, thrombocytopenia, agranulocytosis, and aplastic anemia have been reported with thiazides. Do periodic blood studies in cirrhotics to check for nondrug-related variations in blood pictures, and in patients with folic acid depletion, since 'Dyrenium' may contribute to appearance of megaloblastosis. Antihypertensive effect may be enhanced in post-sympathectomy patients. Use cautiously in surgical patients. The following may occur: transient elevated BUN or creatinine or both, hyperglycemia and glycosuria (diabetic insulin requirements may be altered), hyperuricemia and gout, digitalis intoxication (in hypokalemia), decreasing alkali reserve with possible metabolic acidosis. 'Dyazide' interferes with fluorescent measurement of quinidine.

Adverse Reactions: Muscle cramps, weakness, dizziness, headache, dry mouth; anaphylaxis, rash, urticaria, photosensitivity, purpura, other dermatological conditions; nausea and vomiting, diarrhea, constipation, other gastrointestinal disturbances. Necrotizing vasculitis, paresthesias, icterus, pancreatitis, xanthopsia and, rarely, allergic pneumonitis have occurred with thiazides alone.

Supplied: Bottles of 100 and 1000 capsules; Single Unit Packages of 100 (intended for institutional use only).

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Letters to the Editor

The Letters To The Editor column is a means for the KMA physicians to express their opinions and viewpoints on varied topics. If you have an item you would like brought before your fellow practitioners, please submit it to Letters To The Editor, Kentucky Medical Association, 3532 Ephraim McDowell Dr., Louisville, Kentucky 40205. Communications should not exceed 250 words. The right to abstract or edit is reserved by the editors of *The Journal*. Names will be withheld upon request, but anonymous letters will not be accepted.

An Open Letter to KMA Members:

Why don't you belong to KEMPAC? I have never talked to the first one of you who are non-political. Yet, there are over 4,000 MD's in Kentucky, over 3,000 KMA members, but only approximately 600 MD's belonging to KEMPAC. For your information, KEMPAC was established as the political arm for KMA to help fight to keep our freedom and what we all believe in. You don't believe in organization? You are more effective by yourself? I've heard this many times. I don't believe any of you believe this. If there is any doubt about organization, look at labor and see what they have done and are doing to us.

KEMPAC has been successful in the past and will continue to be successful in the future, but only with full support from our profession. This is your organization. We need you. We need your membership and we need you working for medicine. It can't be done by individuals and/or splintered groups. Your board can't do it by themselves. It takes a continued effort by the entire profession. Just think what \$100 from each KMA member could do toward candidate support—\$300,000. Money still talks. Also, put 3,000+ MD's behind candidates with medicine's philosophy at heart! Can you see our potential? But, we must be an organization. It's up to you to help us accomplish this goal.

We will not support candidates who in the past have voted against medicine, even if they are sure winners. Sometimes support given may be questioned by some of you, but this support may pay dividends in the future. I will also assure you KEMPAC is strictly bipartisan, composed of a board equally represented by the two major parties pulling the most votes in the past general election. KEMPAC, through member candidate support committees, supports candidates the **doctors** feel would be receptive to medicine's viewpoint! We **do not** have anything to do with the passing of legislation. This is the job of the lobbyist. But if candidates have received our support, they are more receptive to listening to our lobbyist's viewpoints.

Your 1977 dues are payable now. If you haven't joined as yet, do so today. Family Memberships are

\$50; Sustaining Memberships, \$125; or \$200 for both husband and wife. Send your check to KEMPAC to the KMA office. We must all work together to accomplish our goals.

Donald C. Barton, M.D.
Chairman for KEMPAC
Doctor's Park
Corbin, Kentucky 40701

If your practice is incorporated, KEMPAC and AMPAC voluntary political contributions should be written on a PERSONAL CHECK. Contributions are not limited to the suggested amount. Neither the AMA nor the KMA will favor or disadvantage anyone based upon the amounts of or failure to make PAC contributions. Copies of KEMPAC and AMPAC reports are filed with the Federal Election Commission and are available for purchase from the Federal Election Commission, Washington, D.C. Contributions are subject to the limitations of FEC Regulations, Sections 110.1, 110.2, and 110.5. (Federal regulations require this notice).

To The Editor:

For a biography of Doctor Alton Ochsner of Ochsner Clinic, New Orleans, opinions, evaluations, anecdotes, reminiscences, photos are needed. Photos will be carefully handled and returned. All material gratefully received by:

Ira Harkey, Ph.D.
401 Metairie Road, 706
Metairie, Louisiana 70005

To The Editor:

I am sorry that I did not see the write-up submitted for the Grand Rounds presentation on psoriasis in the November issue of *The Journal* of KMA.

The blanket statement concerning the clearing of psoriasis in one month by PUVA therapy (psoralens per os two hours before exposure to an intensive source of UV light of wave lengths longer than 3200 Å units—UVA) unfortunately is not borne out by practical experience. The majority of patients respond but not that rapidly and all acquire a tan as deep as they are capable of. This method of treatment is also being used experimentally now to control the early stages of mycosis fungoides.

William E. McDaniel, M.D.
342 Waller Avenue
Lexington, Kentucky 40504

Occupational Medicine News

Marcus M. Key, M.D., Professor of Occupational Medicine at the School of Public Health of The University of Texas Health Science Center at Houston, has announced that the school has been awarded an Eastman Kodak Fellowship in Occupational Medicine.

Physicians interested in the residency training program at the School of Public Health should contact Doctor Key at (713) 792-4300.

Henry B. Asman, M.D.

1909-1976



HENRY B. ASMAN, M.D., whose general health had been good except for well-controlled moderate hypertension, collapsed in his home early Tuesday evening 21 December 1976, after having a sudden substernal pain. He never regained consciousness. Despite extensive and prolonged cardiopulmonary resuscitation efforts, he was pronounced dead at 9:50 p.m. The post mortem examination showed a dissecting aneurysm of the ascending aorta which had produced hemorrhage into the pericardial sac and cardiac tamponade. His heart and coronary arteries were normal.

Henry was born in Louisville, Kentucky on June 21, 1909, the son of Doctor and Mrs. Bernard Asman. A graduate of the University of Notre Dame, he received his medical degree from the University of Louisville in 1936. Internship at Louisville General Hospital was followed by a general surgery residency at St. Joseph Infirmary and the private practice of coloproctology in 1939 with his father.

From the time that Doctor Asman was discharged from the United States Army in 1946 as a Lieutenant Colonel, until his death on December 21, 1976, his service to his profession, his patients, his community, his family, and his church epitomizes the high ideal of dedication which we all strive to achieve. To recount all the accomplishments of Doctor Asman would be impossible in this brief account; however, his service to the medical profession and to this Association is recorded here as a dedicatory note to his memory.

Doctor Asman not only belonged to but took an active part in the work of many organizations. In addition to the Kentucky Medical Association, he was a member of the Jefferson County Medical Society, American Medical Association, Southern Medical Association, Southeastern Surgical Congress and Kentucky and Louisville surgical societies. He was a Fellow of the American College of Surgeons and an Associate Fellow of the American Proctologic Society and served as President of many groups to include the Ohio Valley Proctologic Society, the Catholic Physicians Guild of Louisville, and the Kentucky Division of the American Cancer Society. A former member of the Board of Directors of the Kentucky Chamber of Commerce and the Kentucky Physicians Mutual, Doctor Asman was employed as the Director of Medical Services of Blue Shield.

His contributions to the Kentucky Medical Association are also too numerous to mention in great detail. Doctor Asman, who served KMA as Vice-President in 1961 and as Secretary from 1963-1967, was installed as its President in 1968. During this time he was a member of countless committees and the innovator of several programs of the Association. He was chairman of the committee which developed the Kentucky Foundation for Medical Care, becoming its first president in 1972.

His involvement with *The Journal of the Kentucky Medical Association* began in 1970 when he was appointed by the Board of Trustees to serve as Associate Editor, a position which he held until September, 1976, when he was then appointed Editor. Many of the changes evident in this issue were initiated by Henry who assumed the Editorship with high-spirited and youthful enthusiasm. He modified the format and added to the content after long thoughtful study and many consultations. He enlisted the aid of several specialists in the field of journalistic publication including his son, an expert in graphic arts. It is appropriate that this issue (Volume 75, Number 1) is dedicated to Henry because the momentum generated by his good work will move our journal to even greater achievement.

In 1975, Doctor Asman was honored by receiving the KMA Distinguished Service Award. Doctor Richard Grise, Chairman of the Awards Committee at that time aptly remarked, "Doctor Asman is not honored today for his having achieved the top level of election to official positions in the many organizations in which he is interested. . . . the personal qualities that surround and emanate from this man of integrity, quiet forcefulness and sincere interest in his fellow man have prompted his selection today."

A practicing physician, an educator, an administrator, a colleague, a friend. . . . he will be missed indeed!

JSL



EDITORIAL

Journal Takes New Look On 75th Anniversary

IN celebration of its 75th Birthday, *The Journal* presents a new face and initiates a few new features which, it is hoped, will prove beneficial to the Association and its members.

The cover is simple in design, placing all of the emphasis where it belongs—for this is *The Journal of the Kentucky Medical Association*.

It is the desire of the Editorial Board that we continue to publish scientific papers of high quality stressing the clinical rather than research in the belief that such contributions will be of more value to our members. We believe that *The Journal* should provide a forum for Kentucky physicians, and we encourage them to submit papers for consideration by the Scientific Editor and the Board.

We will also continue to seek out worthwhile contributions from the faculties of our two medical schools and encourage them to provide abstracts of Grand Rounds and other conferences which would be of great interest to the practicing physicians and add to their store of current medical knowledge.

We believe, however, that *The Journal* has another function which, perhaps, has not received sufficient emphasis in recent years.

There have been several instances in the past couple of years when the membership, yea, even some of the Delegates, have shown a distressing lack of knowledge or understanding of their Association, its officers, and its staff, and what is being done every day in behalf of physicians by KMA.

This breakdown in communications needs to be corrected, and we believe that *The Journal* can have a significant impact in that direction.

With that in mind, therefore, we intend to publish abstracts of the minutes of all meetings of the Board of Trustees and its Executive Committee and of other committees of the Association when important matters have been acted upon. We have asked each Trustee to submit a report from his District on a quarterly basis. We encourage county societies to send in reports and news items at any time.

We will report on the activities of the officers and the staff—a report which usually will reflect a degree of dedication and devotion to the Association which many, who have never been involved, will find astonishing.

The Editorial Board welcomes your comments, your suggestions, and your criticisms through an active "Letters to the Editor" column. It is our desire that *The Journal* make a meaningful contribution to the continued success of our Association.

HBA

Due to the untimely death of Henry B. Asman, M.D., whose devotion and dedication to KMA has been exemplified by his many honors, it is only fitting that we commemorate this Journal to him. Above is the last editorial he wrote which was to be the first in his revitalization plan for The Journal as a new form of communications between the membership.

Anomalous Cases—Astonishing Cures

Volume 75—Number 1

WILLIAM Loftus Sutton, M.D., of Georgetown, was elected the first President of the Kentucky Medical Association at the organization meeting held in the Senate Chamber at Frankfort on 1 October 1851. A year later (20 October 1852) in the Circuit Court Room at Louisville, Doctor Sutton, in his Presidential Address before the Second Annual Meeting of our group, emphasized the second of two major objects of the Constitution: "The cultivation and advancement of science and literature, by the collection, diffusion, interchange, preservation, and general circulation of medical knowledge throughout the State." In this scholarly address he recognized that medical journals must be supported by subscriptions as well as contributions and deplored the small subscription list and a vastly smaller list of contributors. In an effort to encourage contributors he suggested: ". . . if a man wishes to understand a subject thoroughly, one of the best things he can do is to write an elaborate treatise on it," and "We all have our 'anomalous cases' and our 'astonishing cures' which we love to rehearse in the ears of our kind and credulous friends: why not lay them before those whose judgment is worth something; whose good opinion will confer honor?"

From 1851 the business and scientific sessions of the annual meetings were reported to the membership annually via the voluminous (and usually tardy) *Proceedings* and later via the *Transactions* until 1903 when a monthly *Bulletin* was begun. In the lead Editorial of Volume 1, Number 1, it is stated: "The papers read at the annual meeting of the Association are to be journalized, will be published monthly, three to four at a time, and will appear so persistently and in such live form, that they will be received with much greater anticipation than the old volume of transactions." *The Journal of the Kentucky Medical Association* was the eighth state journal established in the United States and it was recognized as "the mouthpiece of the organization," a medium for county medical society reports, a source of correspondence exchanges and afforded a means for "suggestions about anything."

This journal has developed admirably through the years following its humble conception and exalted growth and has become one of the nation's outstanding medical periodicals. In Volume 25, in addition to excellent scientific papers, there were ads for the first antiperspirant, Nonspi, Horlicks Malted Milk, and mercurochrome; Battlecreek Sanitarium, The Pope Hospital, and The Solomon Clinic carried pictorials; and there was a favorable review of Fred Rankin's book on Surgery of the Colon. A news item told of J. Murray Kinsman moving his office to the Brown Building for practice limited to Internal Medicine. There were whisky advertisements in some issues and Volume 50, Number 1, carried cigarette advertisements—cigarettes without filters and cigarette packages without health hazard warnings.

With this issue, Volume 75, Number 1, there are high hopes for an even better journal in the future, despite the ever-increasing costs of publication and ever-decreasing number of beneficent advertisers who defray those costs. We anticipate editorials less contrived and by knowledgeable guest editorialists, the publication of Grand Rounds from our two great medical schools, relevant book reviews, and good scientific articles from our membership, anomalous cases and astonishing cures indeed!

Better and more valuable content is the wish for Volume 75 and for those volumes to follow!

JSL



SPECIAL ARTICLES



Did You Know?

D. KAY CLAWSON, M.D.*

AT the recent KMA Annual Meeting I was amazed to hear, from the questions asked, the amount of misinformation that exists in the medical community regarding the University of Kentucky Albert B. Chandler Hospital. I thought it might be interesting to share with the physicians of the state some of the facts—1976. The questioning goes somewhat like this:

Q—I haven't been able to get a patient in that hospital for six months. What right do you have to refuse admission to a patient?

A—The hospital currently operates 436 beds at an average occupancy of 90%. Many specialty units consistently operate at 100% of capacity. This continuous level of patient volume overwhelms the capacity of staff and individual diagnostic and treatment services. To accept patients beyond our bed capacity would increase risk to the patient and diminish the quality of care. This is adequately demonstrated in the obstetrical division where we consistently try to manage an occupancy above 100%. The addition of beds in certain areas is badly needed. This requires significant financial outlay and approval by health planning agencies. Currently, we are in the process of developing 20 additional adult medical-surgical beds and eight additional bassinets for sick babies. In spite of this effort, the problem will continue to be acute at intervals until more beds are added or comparable facilities are made available in regional hospitals.

Q—Why does U.K. treat routine conditions? I thought it was a tertiary care hospital for research into esoteric conditions.

A—The hospital was designed to provide a balance in the types of conditions seen. By demand it has been increasingly caring for sicker patients with more difficult problems.

Currently fully 14% of its beds are in intensive care units. While we are happy to make our specialized facilities available, it is important to meet our educational mission to have all types of conditions represented in our hospital population. While we are happy to be a tertiary care referral center, it is essential that our programs have access to all types of patients. In addition to the efforts to decentralize our educational program to community hospitals, we must also develop model primary care units at the Medical Center. If our commitment to primary care is to be achieved, we must expand our Family Practice unit on the campus as well as develop affiliations for residencies in other regions of the State.

Q—I thought this was a state hospital for the medically indigent. Why did my patient receive a hospital bill for over \$1,000?

A—The hospital survives through reimbursement from patients and third parties. In the early years of the hospital's operation over 75% of operating costs were supported through a state appropriation. The appropriation this year represents less than 20% of operating costs. The hospital uses a combination of Kentucky Medical Assistance income ceilings and the Bureau of Labor's minimum standard of living index to determine the patient's ability to pay. Those who do not meet the criteria for allowances are expected to pay for the cost of care. Thus far, we have not denied care to a patient based on inability to pay. This possibility looms on the horizon given declining public support and increasing limitations on reimbursement by such programs as Medicare.

Q—Why does University Hospital charge twice as much as other hospitals?

A—Cost at University Hospital reflects the level of service provided and not the charge for

*Dean, College of Medicine, University of Kentucky, Lexington

individual services. Patients referred to the hospital have complex health problems which require the availability of a wider range of services. The use of these services is more intense. The fact that 14% of its beds are set up for intensive care, versus about 5% in other hospitals, contributes to a higher cost per patient day. Even though many expensive services (Neonatal Intensive Care, kidney dialysis and transplant, linear accelerator, etc.) are available *cost has been contained*. According to data recently released by Blue Cross, the per day cost at University Hospital increased 39.3% over the last five years compared to 32.0%, 38.2%, and 75.4% in local hospitals. A recent survey of eight comparable University Hospitals in the Southeast identified University Hospital as having the lowest per day cost in the group.

Q—Why do the University doctors, being paid state salaries, have to charge fee for service?

A—The clinical faculty at the University Hospital charge for their services on the usual and customary basis in the region. This is necessary as they provide support for themselves and much of the teaching program through this mechanism. At the present time only 25% of the salaries of the clinical faculty come from State sources, placing us 19th among medical schools in the degree to which practice dollars support the faculty. The percentage of State support is dwindling yearly. Recently studies have shown that U.K. salaries are only average compared with our benchmark institutions in surrounding state schools and below the national average.

Q—A patient of mine recently went to your emergency room and had to wait four hours for care of a minor condition.

A—This happens frequently. The hospital emergency room was designed to handle a limited number of emergencies. It has become a

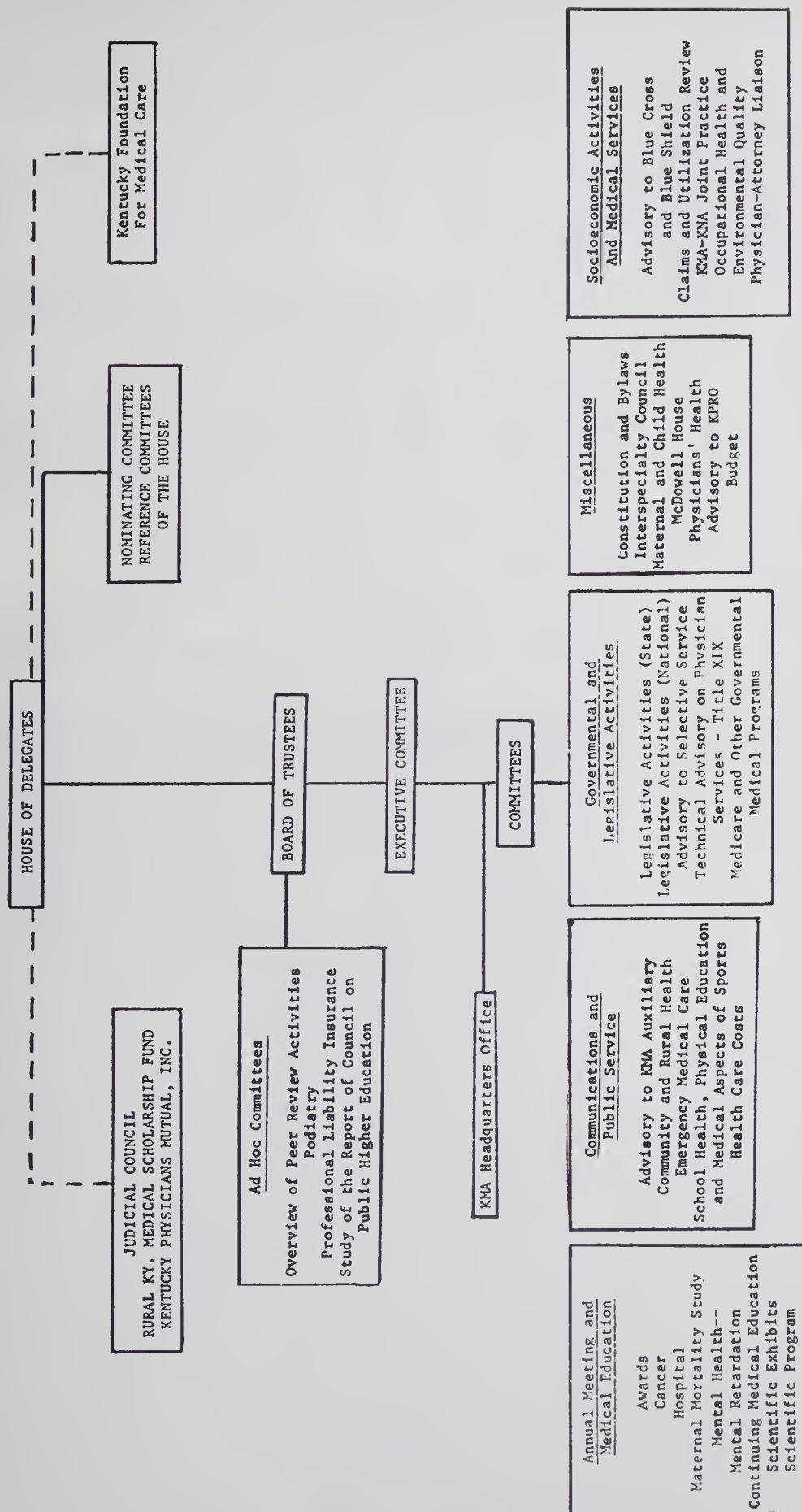
regional center handling over 36,000 visits per year. Unfortunately, it serves as the primary source of medical care for hundreds of patients who do not have access to such care elsewhere. The emergency room is staffed with physicians and supporting personnel to provide around-the-clock service. When these resources are being consumed by patients requiring emergency care, the patient seeking routine medical care in the emergency room may have to wait.

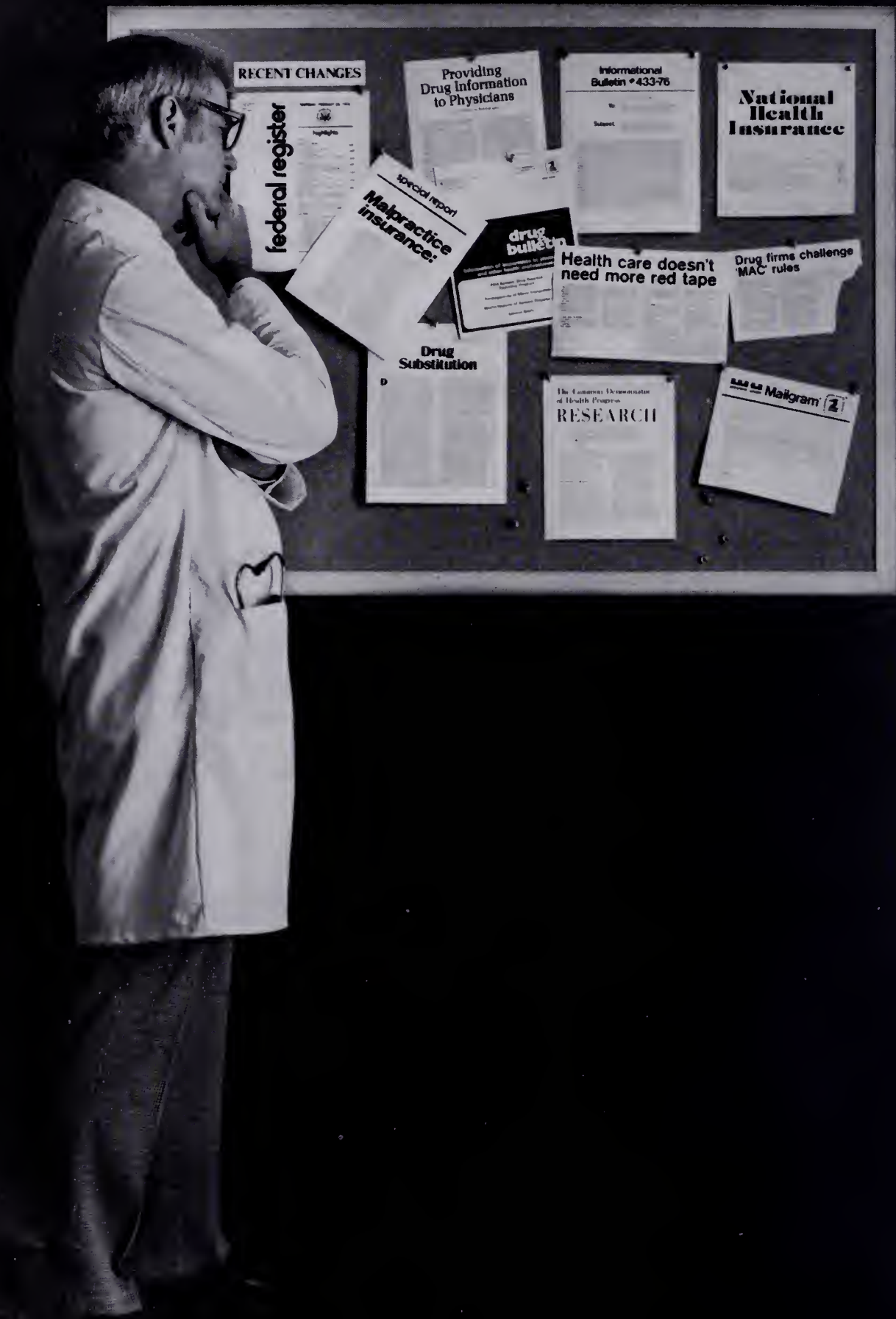
Q—With the critical need for doctors in rural Kentucky why aren't you concentrating more of your resident positions in primary care?

A—Despite the fact that we still do not have enough physicians being trained in primary care to satisfy the needs of the State, the same can be said for many specialty areas. U.K. has an enviable record in this regard. Despite the fact that the Hospital has increasingly become a tertiary care center, this past year 41% of our first year residency positions were in primary care. We are well ahead of the new federal Manpower Legislation mandating 35% next year, 40% the year after, and 50% the following year of residency positions in primary care in order to receive capitation funding.

Summary

University Hospital represents a significant resource within the health care delivery system in Kentucky and has an enviable record in providing primary, secondary, and tertiary care to patients of all economic levels as well as responding to our educational and research missions. University Hospitals, in general, represent a unique element in society's effort to respond to deficits in health education and health services. They require broad support in order to carry out the mission assigned to them by the public. If that support is lacking, the public must be willing to accept the resulting deficiencies.





THERE ARE A LOT OF PEOPLE GETTING BETWEEN YOU AND YOUR PATIENT.

Medicine today is in the spotlight, subjected to all kinds of scrutiny. Your control over patient therapy is being monitored, judged and occasionally abrogated, sometimes by unknown third parties.

The worry is that in the wake of this focus, the relationship between you and your patient will be weakened, without offsetting benefits. Consider three examples:

Drug substitution In most states, pharmacy laws, regulations or professional custom stipulate that your generic prescriptions be filled with the precise product you prescribe. But in the last five years, a dozen or so State laws have been changed, permitting the pharmacist in most cases to select a product of the same generic drug to fill any prescription.

Ironically, this dilution of physician control has taken place against a background of growing evidence that purportedly equivalent drug products may be inequivalent, since neither present drug standards nor their enforcement are optimal. In fact, the FDA itself says it has not enforced the same standards for hundreds of "follow-on" products that it had applied to the original FDA approvals. Thus physician control over patient therapy is being eroded with a risk that patients may be exposed to drugs of uncertain quality.

The major advertised claim for substitution is reduced prescription prices for consumers. Yet no documentation of any significant savings has been produced.

MAC Maximum Allowable Cost, MAC for short, is a federal regulation designed to cut the Government's health bill by setting price ceilings for drugs dispensed to Medicare and Medicaid patients. Unless the prescriber certifies on the prescription that a particular product is medically necessary, the Government intends to pay only the cost of the lowest-priced, purportedly-equivalent,

generally-available product. The effect of the program may be that elderly and indigent patients will be restricted to products which someone in Washington believes are priced right. Practicing doctors will have little to say about administration of the program, since Government will have absolute authority to make its choices stick.

The drug lag The future of drug and device research depends upon a scientific and regulatory environment that encourages therapeutic innovations. The American pharmaceutical industry annually is spending more than \$1 billion of its own funds and evaluating more than 1,200 investigational compounds in clinical research. Disease targets include cancer, atherosclerosis, viruses and central nervous system disorders, among others. But there is a major barrier to the flow of new drugs to your patients: The cost of the research is more than ten times what it was, per product, in 1962; and whereas governmental clearance of new drug applications took six months then, it commonly consumes two years now.

The FDA needs adequate time, of course, to consider data. But it is equally clear that the present approval process contributes to needless delay of needed therapy. That's why the increased efficiency of the drug approval process is vital to all our futures.

If these issues concern you, we suggest that you make your voice heard—among your colleagues and your representatives in State legislatures and in Washington.

It could make a difference in your practice tomorrow.



Pharmaceutical Manufacturers Association
1155 Fifteenth Street, N.W., Washington, D.C. 20005

Giffen Discusses BC-BS Merger

Donald W. Giffen, President of Blue Cross and Blue Shield of Kentucky, was invited to address the KMA Board of Trustees on December 16, 1976, in regard to the recent merger of the two Plans. Following are his remarks:

As the relatively new President of Blue Cross and Blue Shield, I am appreciative of the invitation to make a few remarks, particularly as they refer to the forthcoming merger of the Blue Cross Plan and the Blue Shield Plan into a single corporation.

Let me first mention that I have been with the Plans for a long time—Blue Cross since 1946, which means I am now in my 31st year, and Blue Shield since its inception in 1948. The philosophy of the Boards of both corporations has always been to work with the providers and provider organizations in the approach to problems and issues. That philosophy will not change with merger even though today's climate and environment may require some changes in our approaches and that each of us work a little harder on our relationships.

The environment in which you practice and Blue Cross and Blue Shield operates has become increasingly complex and filled with pressures from many sources, not the least of which is government. In the last few years we have seen:

1. The development and promotion of federally financed and federally subsidized HMO's.
2. Professional Standards Review Organizations.
3. Increased emphasis on Comprehensive Health Planning and now the formation of Health Service Agencies.
4. Continuous new restrictions on Medicare and Medicaid reimbursement with resulting subsidization by the private sector.
5. Legislation on fraud and abuse, particularly in Medicaid.
6. Administration of government programs put out for bid. The CHAMPUS program was put out for bid. Because of the requirements which would result in loss of confidentiality of physicians' profiles we elected not to bid. Our administration ceases January 31, 1977.
7. An investigation still in progress by the Federal Trade Commission of certain specialty groups, the AMA, National Association of Blue Shield Plans and all Blue Shield Plans.
8. Increasing regulation from state regulatory bodies (Insurance Commissioners) refusing to grant Blue Plans necessary rate increases.

We have seen health care costs continue to rise at approximately twice the rate of inflation, brought about, among other things, by the seemingly insatiable demand by the public for health services, skyrocketing hospital liability and malpractice insurance rates, new technology, ERISA, cost of borrowed capital, increase in minimum wages, etc.

We are seeing increasing pressures from management and labor for cost controls because contributions to the health care coverage become an ever more significant component of production costs reducing the availability of money for increased take-home pay.

We are aware that a new administration takes office next month, one that is publicly committed to National Health Insurance and to some form of cost controls. Apparently, no one really knows at this point exactly

what form or what timetable Mr. Carter's proposals on these issues will take, but there is little argument on his commitment.

The Blue Plans, in the last calendar year (1975), collectively lost more than \$600 million. Fortunately, they are not losing at the same rate in 1976 and may even break even for 1976.

In this environment, the two Boards sought to determine whether it would be in the public interest to merge Blue Cross and Blue Shield into a single corporation in Kentucky. A joint committee composed of members from each Board was appointed. The committee was aware of the fact that in some areas—notably New York City (the largest Plan in the country) merger had been ordered by the Insurance Commissioner and that merger was in process in other areas, i.e., Michigan and Illinois. The Insurance Department examiners in two successive examinations had recommended merger be considered in Kentucky.

After approximately one year of study, the joint committee recommended merger as being in the public interest and in the interest of the two Plans. Some of the advantages identified are:

1. Both Plans are committed to a common goal of providing a prepayment mechanism to assist their members in paying for their health care needs at the lowest possible costs.
2. To the extent possible, they already operate as one. Officers and staff are common to both. They share the same quarters, jointly own the building. At the present time, more than 1,000,000 of our approximately 1,500,000 members are covered by supplemental benefit programs (Major Medical, Extended Benefits, and Medicare Supplement) which are jointly underwritten by both Plans.
3. Considerable public confusion would be eliminated as a high percentage of the public does not now know there are two separate corporations. Even some of the medical profession is not aware of this.
4. One corporation will permit operation under the same sections of the insurance code rather than each operating under different sections of the code.
5. Merger would enable greater coordination and development of new products and benefits.
6. Operating efficiencies would be improved.
7. Communications with providers would be improved.
8. Operating and administrative costs could be reduced, i.e.
 - A. Single certificates
 - B. One set of corporate books
 - C. One principal bank account
 - D. CPA and Insurance Department examinations reduced
 - E. Single investment policy
 - F. Eliminate separate rate increases
 - G. Eliminate the question of which corporation covers what benefit
9. One Board would permit development of uniform policy—of consolidation of expertise of each Board and

cross-fertilization of knowledge and broader perspective. It could approach a solution to issues together rather than separately and eliminate the duplication of committees and meetings.

10. A merger would broaden the financial base through the consolidation of reserves and permit the combination of operating expense. Blue Shield operating expense, as a percentage of income, is twice that of Blue Cross, primarily because the income per contract is substantially greater for Blue Cross. This will permit us to be more competitive in the marketplace.

11. There are many more advantages which could be enumerated but I would like only to mention one more. There no longer appears to be a debate as to whether or not the country will have some form of National Health Insurance but rather when and in what form. All of our assumptions still are that the private sector, including Blue Cross and Blue Shield, will be involved in underwriting and in administration. A single corporation with a broader financial base and uniform expense ratios would be in a better position to deal with the challenges presented by NHI than could two separate corporations.

The merger has been approved by all regulatory bodies and will be effective January 1, 1977. The name of the merged corporation will be Blue Cross and Blue Shield of Kentucky, Inc. I would like to emphasize that no change in philosophy or corporate policy is contemplated nor was intended by either Board as a result of merger. In your daily dealings with Blue Shield and Blue Cross we don't think you will even know the difference. No changes in staff are contemplated as all of them are currently joint Blue Cross and Blue Shield. We expect to continue to work with you in the same manner and with the same objectives as we have over the past many years.

Initially, the two Boards as they now exist will be combined into one Board. All current Board members will remain on the new Board. Over a period of time the size of the new Board will be reduced by attrition. Members of the current Blue Shield Board will have additional input which they do not now have because they have never been involved with Blue Cross. The two Boards have worked together since inception without conflict or incident and I think now are looking forward to working jointly.

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NAVY

For more information, see:

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Navy Recruiting District
600 Federal Place
Louisville, Ky. 40202
(502) 582-5174**

**Special Session of
KMA House of Delegates**

February 10

**Ramada Inn-Hurstbourne
Louisville**

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Each tablet contains 180 mg anhydrous theophylline (90 mg in the immediate release layer and 90 mg in the sustained release layer); 48 mg ephedrine hydrochloride (16 mg in the immediate release layer and 32 mg in the sustained release layer); and 25 mg phenobarbital in the immediate release layer.

Each 5 ml teaspoonful contains 32.5 mg theophylline, 6 mg ephedrine HCl, and 2 mg phenobarbital; the alcohol content is 15%.

See next page for brief summary.

SUSTAINED ACTION



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TEDRAL® Elixir

CAUTION: Federal law prohibits dispensing without prescription. Tedral SA without prescription.

Description. Tedral: each tablet contains 180 mg theophylline, 24 mg ephedrine hydrochloride, and 8 mg phenobarbital.

Tedral SA: each tablet contains 180 mg anhydrous theophylline (90 mg in the immediate release layer and 90 mg in the sustained release layer); 48 mg ephedrine hydrochloride (16 mg in the immediate release layer and 32 mg in the sustained release layer); 25 mg phenobarbital in the immediate release layer.

Tedral Elixir: each 5 ml teaspoonful contains 32.5 mg theophylline, 6 mg ephedrine hydrochloride, and 2 mg phenobarbital; the alcohol content is 15%.

Indications. Tedral, Tedral SA, and Tedral Elixir are indicated for the symptomatic relief of bronchial asthma, asthmatic bronchitis, and other bronchospastic disorders. They may also be used prophylactically to prevent or minimize asthmatic attacks and are of value in managing occasional, seasonal or perennial asthma.

Tedral SA (Sustained Action) offers the convenience of b.i.d. dosage.

Tedral Elixir is convenient for persons who may have difficulty in swallowing tablets.

These Tedral formulations are adjuncts to the total management of the asthmatic patient. Acute or severe asthmatic attacks may necessitate supplemental therapy with other drugs by inhalation or other parenteral routes.

Contraindications. Sensitivity to any of the ingredients; porphyria.

Warnings. Drowsiness may occur. PHENOBARBITAL MAY BE HABIT-FORMING.

Precautions. Use with caution in the presence of cardiovascular disease, severe hypertension, hyperthyroidism, prostatic hypertrophy, or glaucoma.

Adverse Reactions. Mild epigastric distress, palpitation, tremulousness, insomnia, difficulty of micturition, and CNS stimulation have been reported.

Average Dosage. *Prophylactic or Therapeutic.*

Tedral: *Adults*—One or two tablets every 4-6 hours. *Children*—(Over 60 lb) one-half the adult dose.

Tedral SA: *Adults*—One tablet on arising and one tablet 12 hours later. Tablets should not be chewed. *Children*—Not established for children under 12.

Tedral Elixir: Note: One teaspoonful is equivalent to one-quarter Tedral tablet.

Children—One teaspoonful per 30 lb body weight, every 4-6 hours, unless prescribed otherwise by physician. Should be given to children under 2 years of age only with extreme caution. *Adults*—One to two tablespoonfuls every four hours.

Supplied. Tedral: White, uncoated scored tablets in bottles of 24 (N 0047-0230-24), 100 (N 0047-0230-51) and 1000 (N 0047-0230-60). Also in Unit Dose—package of 10 x 10 strips (N 0047-0230-11).

Tedral SA: Double-layered, uncoated, oral/mottled white tablets in bottles of 100 (N 0047-0231-51) and 1000 (N 0047-0231-60). Also in Unit Dose—package of 10 x 10 strips (N 0047-0231-11).

Tedral Elixir: Dark red and cherry-flavored in 474 ml (16 fl oz) bottles (N 0047-0242-16).

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ASSOCIATIONAL NEWS



KMA Board Calls Delegates Into Special Session on Feb. 10

The KMA Board of Trustees has called for a special session of the House of Delegates for February 10, 1977, at 1:00 p.m. at the Ramada Inn-Hurstbourne in Louisville. At its December 15-16 meeting, the Board received statistical information and heard testimony from representatives of the Medicare Intermediary, Metropolitan Life, concerning the establishment of Kentucky as a single reimbursement area. The Board decided that new information they had just received from Metropolitan was such that it should be disseminated to the House enabling the delegates to have an opportunity to review the latest data and other information prior to March 1, 1977.

The significance of March 1 is that it is the date when Metropolitan commences changing Medicare profiles.

The Board thus felt that sufficient time was available to contact and meet with the House of Delegates in order to receive guidance before implementation as Metropolitan cannot make any changes in profiles until then. Changes in fee profiles would not be realized by individual physicians until sometime in the future.

New information concerning implementation of a single state reimbursement area will be disseminated shortly to the Delegates and a letter from the KMA President to the membership explaining in more detail the facts relating to this issue will be forthcoming. The membership is encouraged to meet with their Delegates and review this information so that their wishes are heard on the House floor.

More details on the December Board meeting will be published in the February issue of *The Journal*.

Joint Practice Seminar Sponsored by KMA-KNA

The Kentucky Medical Association-Kentucky Nurses Association Joint Practice Committee is sponsoring a seminar on March 5, 1977, at the Ramada Inn-Bluegrass Convention Center. This day-long seminar, entitled, "Joint Practice: Now and In the Future," will feature guest speakers from the National Joint Practice Commission as well as local speakers prominent in the field of joint practice.

The seminar will deal with current problems and obstacles in joint practice. For additional information, contact the KMA Headquarters Office.

Ky. AAMA Symposium Planned for Feb. 13

The Kentucky Society, American Association of Medical Assistants, will hold a symposium on February 13 at the Ramada Inn Airport, located at Newburg Road and the Watterson Expressway in Louisville. The theme for the day-long session is "Where in Health Are We Going?"

Presentations will be made on lab procedures, collections, telephone techniques, and Medicare. The Society will also offer the self-assessment examination for medical assistants. For more complete details on the meeting and for registration, medical assistants should contact: Caroline Kelly, 1909 Rutherford Avenue, Louisville,

40205; (502) 452-2055 (home) or (502) 897-0281 (office).

The Kentucky Society recently received several honors at the 1976 Annual Meeting of the American Association of Medical Assistants held September 13 in Chicago. The state group, as well as the Jefferson County Chapter, received two membership awards each for numerical and percentage increases.

Important Champus Message

Effective January 31, 1977, Blue Cross and Blue Shield of Kentucky will no longer serve as Fiscal Agent for CHAMPUS, the Office of Civilian Health and Medical Program of the Uniform Services.

CHAMPUS claims received before February 1, 1977 will be processed under the existing contract with Blue Cross and Blue Shield of Kentucky. Claims received by Blue Cross and Blue Shield of Kentucky on or after February 1, 1977 will be forwarded for processing by the new Fiscal Agent, Planning Research Corporation, McLean, Virginia 22101.

After January 21, 1977 claims and/or correspondence concerning the CHAMPUS Program should be addressed to:

CHAMPUS PRC/ISC
P. O. Box 907
McLean, VA 22101

A toll free number to the new CHAMPUS Fiscal Agent, (800) 336-0392, will be available for any questions you may have.



Trustees' Report

FIFTH TRUSTEE DISTRICT

Cecil L. Grumbles, M.D., Louisville

As the elected representative of approximately 1,000 county members to the state association, I welcome this new opportunity to express these thoughts. I have great difficulty in assimilating the diverse opinions and desires of my colleagues. Some have expressed resentment regarding the requirement of membership at the state level in order to belong to your county society. However, I feel without this arrangement our state association would wither and local societies would soon follow. If there is any strength in physician unity, it is at these levels. Fortunately, the great majority see the wisdom of strong county and state organizations. I believe there has been more interest and enthusiasm among Jefferson County Medical Society members recently than for many years. At the recent state meeting the delegates had a fine attendance record and spent many hours discussing the issues. Peter C. Campbell, M.D., did a superb job as chairman of our delegation.

However, one dark shadow reared its head and that is the tendency for the largest city and the rest of the Commonwealth to be on different wave lengths. There must be room for differences but without self-destruction. Some actions and words said in heated confrontations recently were results of misinformation and failure to investigate rumors.

At the November JCMS meeting a rarely used disciplinary action was voted by the society when a long time member was expelled for unethical actions. I believe this last occurred in the early 1960's. Our Judicial Council acted in a most conscientious and professional manner in this unpleasant task. This clearly showed our mechanism for self-discipline and was widely reported in the local media. The KMA Judicial Council supported the local decision. Could these actions serve as warnings to others? Have we indeed been derelict in self-policing? The public is becoming more suspect of us and without its confidence we will have unsurmountable problems. Wisely, the membership of JCMS voted to support the C.M.E. consortium and will be assessed \$10.00 in 1977. This is done in cooperation with the University of Louisville School of Medicine and eight local hospitals.

In 1977, the dues for JCMS (\$125) and KMA (\$225) total \$350. By attending the Jefferson County Medical Society meetings held on the third Monday of each month, you can learn where some of this goes.

Trustees will report on a quarterly basis. The First, Third, Fourth, Twelfth and Thirteenth Trustee Districts will be featured in the February issue of *The Journal*.

SIXTH TRUSTEE DISTRICT **Earl P. Oliver, M.D., Scottsville**

The Sixth Trustee District welcomes the following new physicians to the District: Jim Whiteside, M.D.,



L. G. Dickinson, M.D., Howard Edgin, M.D., all of Barren County; Chesley Kemp, M.D., Marcus Patton, M.D., Russell Rothrock, M.D., all of Warren County; and Ennco Garcia, M.D., Simpson County.

Allen County, which not too long ago had eight active physicians in practice and now has three physicians, is looking forward to the arrival in December of a pediatrician for the area.

Barren County and the surrounding counties regret the recent closing of the Region A Respiratory Disease Hospital in Glasgow. Hopefully, the Continuing Education Department of one of our medical schools will soon offer a course in the modern treatment of tuberculosis, as this is still a common disease in Kentucky.

Simpson County announces that two local physicians and a pharmacist are constructing office facilities near the local hospital.

Warren County reports that the Bowling Green-Warren County Hospital Commission has obtained a certificate of need from Kentucky to construct a new hospital; they are now in the process of selecting a site. The University of Kentucky Continuing Education Department held a seminar on the "Practice Management of Diabetes" in Bowling Green and physicians from nearby counties attended.

Your Trustee requests that all members of the Sixth Trustee District report to your trustee any news which you would like to be included in *The KMA Journal*. The Sixth District will next have a report in April, 1977.

EIGHTH TRUSTEE DISTRICT **Richard J. Menke, M.D., Covington**

Having been invited by Doctor Asman to present periodic reports from the Eighth Trustee District in



The Journal, I am taking this opportunity to present as my initial report a thumbnail sketch of medicine in this District.

The Eighth Trustee District of the KMA comprises Campbell, Kenton, and Boone counties which are situated on the south shore of the Ohio River across from Cincinnati and comprise a population center of approximately 250,000 people. The anticipated completion of the Kentucky portion of I-275, the development of a number of industrial parks, and the availability of residential property relatively close to the center of downtown Cincinnati all indicate continued growth in the future. Serving this growing area are the physicians of the Campbell-Kenton and Boone County Medical Societies. The membership of the former is approximately 175 physicians and the latter, approximately 25 physicians. Included in the membership are representatives of most specialties and sub-specialties in addition to family physicians.

Three hospitals currently serve the area. St. Elizabeth with 465 beds and William Booth Hospital with 155 beds are located in Kenton County. St. Luke Hospital with 290 beds is located in Campbell County. In addition to this, the construction of St. Elizabeth Hospital South adjacent to I-275, is currently well underway, and there are plans for construction of a new William Booth Hospital in Boone County.

Although we in Northern Kentucky share the somewhat uncertain times with the rest of the profession in the state and county, the overall outlook for the future has been one of expansion and optimism.

ELEVENTH TRUSTEE DISTRICT **Dwight L. Blackburn, M.D., Berea**

The Madison County Medical Society held its annual Christmas meeting and election of officers on December 9. This was most enjoyable for the many doctors who attended.

Richmond has experienced quite a growth in numbers of practicing physicians over the past few years. It is now becoming somewhat of a medical center within its own right. All of the various specialties are now represented in Richmond and a number of the subspecialties are also represented. I want to wish all of the physicians well and thank them for deciding to "settle" in Richmond and in the Eleventh District.

I have been following the hospital boycott in Winchester by the physicians of that immediate area. I hope that the physicians, Board of Directors of the Hospital, and the administrator can get their differences ironed out and get things back to a normal situation.

I want to take this opportunity to encourage the physicians in the Eleventh District to communicate their needs or desires to me so that I can help follow through with them. I would also appreciate any news items or experiences encountered which might be of interest to the physicians of the state via my quarterly report in *The KMA Journal*.

FIFTEENTH TRUSTEE DISTRICT **Harold L. Bushey, M.D., Barboursville**

The past year has been a very active one for the Kentucky Medical Association, the results of which have been seen by all. As you know, the Association works through the committee system and the numerous committees and members have functioned to the benefit of the whole society. I want to compliment the members of the Fifteenth District who have loyally served on these committees and would also urge other members to volunteer to help with the work of our Society.

A District meeting is anticipated for the spring, although no plans have been made. A county society to host the meeting is being sought and I would appreciate hearing from the members of this District for their ideas in regard to time, place, and a program for the Trustee District Meeting.



Did you know . . .

The 1976-77 Associational year started immediately following a record attendance at the 126th Annual Meeting. A three-day **officer-staff conference** was held to study goals for the new year and debrief the one just completed.

On October 27-28, the **Executive Committee** met to direct the implementation of the decisions of the House of Delegates.

November 3rd marked the third time in the past three months that KMA was represented by staff and physicians at an Interim Committee of the Legislature concerning **chiropractic regulations**.

KMA staff continues to monitor the activities of the State Comprehensive Health Planning Council on the use of **CAT Scanners**. On November 11, a moratorium was placed by the Council on approving the use of any more Computerized Axial Tomography (CAT) Scanning machines until some guidelines are developed for frequency of utilization and actual need for the machine.

On November 18, KMA presented its position as directed by the 1976 House of Delegates on **continuing medical education** to the Board of Medical Licensure meeting in Louisville. The Licensure Board, at that meeting decided to "hold in abeyance" their proposed continuing medical education regulation for further study.

Considerable activity has taken place to follow up the 1976 **dues assessment** on liability insurance. Direct billing was initiated on December 1 and is now being done by KMA for 115 county medical societies.

KMA submitted comments in strong opposition to the recently proposed regulations published by the **Social Security Administration** that would establish "reasonable charge criteria" on the maximum amount that would be paid by Medicare for certain medical services, supplies, and equipment.

Comments were also prepared on regulations proposed by the Social Security Administration regarding the Freedom of Information Act and what information should be disclosed to other federal agencies and the public.

KMA was asked to comment on a proposed regulation that would release previous **prescription drugs** for Cold, Cough, Allergy and Bronchodilator and Antiasthmatic Conditions as over-the-counter (OTC). From information obtained from our Delegate to the U.S. Pharmacopeial Convention and representatives to the Kentucky Formulary Council and the University of Kentucky Colleges of Medicine and Pharmacy, KMA went on record as being opposed to this regulation because it was not in the best interest of medicine and the public.

KMA closely monitored the **Special Session of the Kentucky General Assembly** during December as two

health-related issues were being discussed. Those issues were the HMO coverage option to regular group health benefits for state and local government employees and the establishment of a basic coverage compensation fund for malpractice against the University of Louisville.

KMA submitted comments in mid-December to the Department for Human Resources on proposed revisions to licensure standards for ambulatory surgical centers. The proposed revisions included podiatrists with doctors and dentists for anesthesia and utilization review.

Committee Activity

Executive Committee October 27-28

The two-day meeting of the Executive Committee covered an extremely lengthy agenda. Although many routine matters were covered, the main purpose of this meeting was to review all actions taken by the 1976 Session of the House of Delegates and to direct implementation of those actions. In addition, a critique was made of the 1976 KMA Annual Meeting and plans were finalized and policies set for the conduct of the 1977 Session which will also be held at the Ramada Inn in Louisville. Other seminars and workshops on various topics were scheduled throughout the year. Plans for dues billing for 1977 and procedures concerning the implementation of House actions regarding continuing medical education, AMA unified membership, and the 1976 dues assessment were also outlined. The meeting closed with the Executive Committee finalizing the changes in appointments to KMA committees for the current Associational year.

Scientific Program Committee November 4

The purpose of this meeting was to plan the 1977 KMA Scientific Program. It was noted that the Annual Meeting next year will again be held at the Ramada Inn/Bluegrass Convention Center, due in part, to the fact that an all-time record attendance was recorded at the 1976 meeting. Themes for the 1977 Session include "Cardiovascular Problems," "Cancer," "Hypertension," and "Alcoholism." The Chairman of the Scientific Program Committee and the President of the Association are scheduled to meet with the 17 participating Specialty Group Presidents on December 15.

KMA-KNA Joint Practice Co-Chairpersons' Conference November 16

Staff from KMA and KNA met with the Co-Chairpersons of the Joint Practice Committee to outline their responsibilities for implementing the Joint Practice Seminar entitled, "Joint Practice: Now and In the Future," scheduled to be held March 5 at Ramada Inn/Bluegrass

Convention Center. The Seminar will feature speakers from the National Joint Practice Commission as well as prominent local speakers in the field of Joint Practice.

Committee on School Health, Physical Education and Medical Aspects of Sports December 1

This Committee met on December 1, to discuss the role of medicine in the prevention of injuries in High School Athletic Programs. Plans were made to hold the Medical Aspects of Sports Seminar during the Boys High School Basketball Tournament which will be held in March. A new and diversified program will be offered this year which will feature numerous prominent speakers.

Emergency Medical Care Committee December 1

Meeting on December 1, this Committee made plans to disseminate information on how the state's two Military Assistance to Safety and Traffic helicopter units can be contacted when needed. The Committee also plans to make information available as to how the units can best be utilized, as well as when they should not be used.

Representatives from the State Department of Human Resources Emergency Service Program were on hand to update the Committee on the current status of Kentucky's EMS projects. It was reported that the main emphasis of the state had been in obtaining systems for the various area emergency programs.

The Committee made plans for the 1977 Emergency Health Care Seminar which will be held in Louisville at the Ramada Inn on May 25-26.

Headquarters Activity

KMA had physician and staff members in attendance at the following activities and events:

OCTOBER

- 6-8 Officer-Staff Conference, Louisville
- 11 CME Accreditation Site Visit, Jennie Stuart Hospital
- 11 Journal Editors Meeting, Louisville
- 18 JCMS Meeting, Louisville
- 18-20 American Association of Medical Society Executives Regional Workshop, Chicago
- 20 Judicial Council, Louisville
- Comprehensive Health Planning Council, Rough River
- 22 Interim Subcommittee on Business and Professions, Frankfort

NOVEMBER

- 1 Professional Convention Management Association Board Meeting, Chicago
- 3 LRC Administrative Regulations Review Subcommittee, Frankfort

- 4 Blue Shield Board of Directors, Louisville
Scientific Program Committee, Louisville
- 5 Courier-Journal and Louisville Times Press
Luncheon, Louisville
- 5-6 Health System Agency-West Board Meeting,
Owensboro
- 7-10 Medical Assistants Management Program, North-
western University
- 10 Comprehensive Health Planning Council, Frank-
fort
KEMPAC Board of Directors, Louisville
Kentucky Association of Health Care Facilities
Convention
- 11 Allied Medical Conference
Claims and Utilization Review Committee, Louis-
ville
- 15 *Journal* Editors Meeting, Louisville
- 16 Joint Practice Co-Chairmen Conference, Louisville
- 17 Subcommittee on Health and Welfare, Frankfort
- 18 Board of Medical Licensure Hearing, Louisville
- 19 CME Accreditation Site Visit, Good Samaritan
Hospital, Lexington

DECEMBER

- 1 Judicial Council, Louisville
School Health, Physical Education and Medical
Aspects of Sports, Louisville
Emergency Medical Care, Louisville
CAT Scanning Committee, St. Joseph Infirmary,
Louisville
- 1-17 Special Legislative Session, Frankfort
- 2 Health Care Costs Committee, Louisville
Continuing Medical Education Committee, Louis-
ville
Kentucky Peer Review Organization Board
- 4-8 AMA Clinical Convention, Philadelphia
- 7-9 Kentucky State Board Examinations, Louisville
- 13 *Journal* Editors Meeting, Louisville
- 15 Specialty Group Presidents' Meeting, Louisville
McDowell House Board of Managers, Danville
- 15-16 KMA Board of Trustees, Louisville

Charles R. Moore, M.D., Lexington
Satish R. Patel, M.D., Lexington
C. Elliott Ray, M.D., Lexington
Manfred E. Trostel, M.D., Lexington
Donald L. Wakefield, M.D., Lexington
H. Thomas Wiegert, M.D., Lexington
Kokichi Yoneda, M.D., Lexington

FLOYD

Kankanady H. Sehra, M.D., McDowell

FRANKLIN

David L. Douglas, M.D., Frankfort
David H. Parker, M.D., Frankfort

JEFFERSON

Gerald E. Bloom, M.D., Louisville
Seung Cho, II, M.D., Louisville
Norman A. Cummings, M.D., Louisville
Richard A. Fellows, M.D., Louisville
D. K. Gopinath, M.D., Louisville
Arthur T. Hurst, M.D., Louisville
Diosdado T. Irlandez, M.D., Louisville
Udayakumar M. Kayerker, M.D., Louisville
Dexter D. Koons, M.D., Louisville
Janey Lynn Pope, M.D., Glenview
Patricia M. Quinby, M.D., Louisville
Kewal K. Sawhney, M.D., Louisville
Stephen Z. Smith, M.D., Louisville
Jeffrey A. Weiss, M.D., Louisville

LETCHER

Mina Hizona, M.D., Whitesburg

MCCRACKEN

William J. Stodghill, M.D., Paducah

ROWAN

John F. Dineen, M.D., Morehead
Joseph P. Repice, M.D., Morehead

WARREN

John S. Black, M.D., Bowling Green
Chesley Kemp, M.D., Bowling Green
Russell Rothrock, M.D., Bowling Green



Members in the news

NEW MEMBERS

BARREN

Lewis G. Dickinson, M.D., Glasgow

CALLOWAY

Charles E. Cook, M.D., Murray

CAMPBELL-KENTON

Thomas M. Roy, M.D., Latonia
Leo F. Rogers, M.D., Covington

FAYETTE

Mark Bowden, M.D., Lexington
Robert E. Gaetjens, M.D., Lexington
Ronald D. Hamilton, M.D., Lexington
Tae Gee Kiehm, M.D., Lexington
Euishim Edmund Kim, M.D., Lexington

HONORS

Arthur H. Keeney, M.D., Dean of the University of Louisville School of Medicine, presented the Fifth Annual G. Victor Simpson Lectureship at the Washington, D.C. Hospital Center on November 13. Doctor Keeney spoke on "Ocular Malignancy of Contiguous Sites."

Joseph F. Bornheimer, Jr., M.D., Ft. Knox, was recently granted Fellowship in the American College of Cardiology.

Russell G. McAllister, Jr., M.D., Lexington, and Paul J. Arena, M.D., Prospect, were elected as Fellows of the American College of Physicians at a recent meeting of the College's Board of Regents in Philadelphia.

Thomas A. Gallo, M.D., Madisonville; Laman A. Gray, Jr., M.D., Louisville; and Herman Playforth, M.D., Lexington, were recently inducted as Fellows of the American College of Chest Physicians.

Some Perspectives on the Problem of Gonorrhea—Weiler and Maddox
(Continued from page 20)

9. Volk, J. B., Asymptomatic Meningococcal Urethritis, *Br. J. Ven. Dis.* 49:511-12, Dec. 1974.
10. Cowan, M. D., Cree, G. D., A Note on the Susceptibility of *N. Gonorrhea* to Contraceptive Agent Nonyl-P, *Br. J. Ven. Dis.* 49:65-6, 1973.
11. Bolch, O. H., Warren, J. C., In Vitro Effects of Emko on *Neisseria gonorrhea* and *Trichomonas vaginalis*, *Am. J. Obstet. Gynecol.* 115:1145-8, 1973.
12. Cutler, J. D., et. al., Studies on Development of a Vaginal Preparation Providing Both Prophylaxis Against Venereal Disease, Other Genital Infections, and Contraception; 1, Venereal Disease Prophylaxis, Past Experience, Present Status and Plans for Future Studies, *Milit. Med.* 138:88-91, 1973.
13. Singh, B. et. al., Studies on the Development of a Vaginal Preparation Providing both Prophylaxis Against Venereal Disease and Other Genital Infections and Contraception: 11, Effect IN VITRO of Vaginal Contraceptive and Non-Contraceptive Preparations on *Treponema pallidum* and *Neisseria gonorrhea*, *Br. J. Ven. Dis.* 45:205-15, Sept. 1969.
14. Spencer, T. D., Elimination of Gonorrhea (correspondence), *Br. J. Ven. Dis.* 49:391, 1973.
15. Lee, T. Y. et. al., Potential Impact of Chemical Prophylaxis on the Incidence of Gonorrhea, *Br. J. Ven. Dis.* 49:65-6, 1973.
16. Litt, I. F. et. al., Gonorrhea in Children and Adolescents, *J. Pediatr.* 85(5):595-607, Nov. 1974.
17. Barrett-Connor, E. et. al., Trial of a Method of Self-Screening for Gonorrhea, *Br. J. Ven. Dis.* 48:310-18, 1972.
18. Olsen, A. G., Epidemiologic Measures Against Gonorrhea; Experience in Greenland, *Br. J. Ven. Dis.* 49:130-8, 1973.
19. Willcox, R. R., Epidemiologic Treatment in Venereal Diseases Other Than Syphilis, *Br. J. Ven. Dis.* 49:116-28, 1973.
20. Babione, R. W. et. al., Navy Experiences with Penicillin, Oral Use as a Prophylaxis, *U.S. Armed Forces Med J.* 3(7):973-90, 1952.
21. Nobel, R. C., personal communication, Feb. 1976.
22. Rees, E. C., Gonococcal Salpingitis, *Br. J. Ven. Dis.* 45:205-15, Sept. 1969.
23. Shanholtz, M. I., Project PROTECT, *Va. Med. Mon.* 102(1):41 Jan. 1975.



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10. Armitage, P., Statistical methods in medical research. New York, John Wiley & Sons, Inc. 1971, pp 101-107.
11. Moxley, T. E., Royer, G. L. and Hearron, M. S. et. al., Ibuprofen versus buffered phenylbutazone in the treatment of osteoarthritis: Double blind trial. *J. Amer. Ger. Soc.* 23:343-349, 1975.
12. Aspinall, R. L., Differential effect of spironolactone on the ulcerogenic and anti-inflammatory activities of indomethacin. *Proc. Soc. Expl. Biol. and Med.* 135:561-564, 1970.
13. Main, I. H. M. and Whittle, B. J. R., Effects of indomethacin on rat gastric acid secretion and mucosal blood flow. *Br. J. Pharmacol.* 47:666, 1973.
14. Menguy, R. and Desbaillets, L., Role of inhibition of gastric mucus secretion in the phenomenon of gastric mucosal injury by indomethacin. *Amer. J. Dig. Dis.* 12:862-866, 1967.
15. Menguy, R. and Desbaillets, L., Influence of phenylbutazone on gastric secretion of mucus. *Proc. Soc. Expl. Biol. Med.* 125:1108-1111, 1967.
16. Abdel-Galil, A. A. M. and Marshall, P. B., Phenylbutazone and histamine formation in rat glandular stomach. Its relationship to gastric ulceration. *Br. J. Pharmacol. Chemother.* 33:1-14, 1968.
17. Brodie, D. A., Marshall, R. W. and Moreno, O., Effect of ulcerogenic drugs on gastric acidity in the rat with chronic fistula. *Gastroenterology* 43:675-679, 1962.
18. Lin, T. M., Warrick, M. W., and Evans, D. C. et al., Action of the anti-inflammatory agents, acetylsalicylic acid, indomethacin, and fenoprofen on the gastric mucosa of dogs. *Res. Comm. Chem. Path. Pharmacol.* 11:1-14, 1975.
19. Parke, D. V., Lindup, W. E. and Shillingford, J. S., The effects of ulcerogenic and ulcer healing drugs on gastric mucus. *Gut* 16:396, 1975.
20. Katona, G., Clinical and objective assessment of naproxen through 5 years of clinical experience. *Arz. Forsch.* 25:327-333, 1975.
21. Hayes-Allen, M. D., Naproxen and gastrointestinal hemorrhage. *Br. Med. J.* 1:572-573, 1974.
22. Matts, S. F. G., Naproxen and gastrointestinal hemorrhage. *Br. Med. J.* 2:52, 1974.

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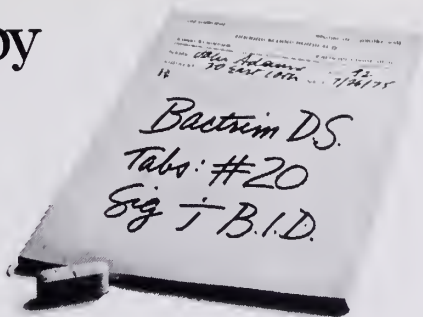
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0-day Bactrim therapy outperforms 10-day ampicillin therapy.



In a multicenter, double-blind study of patients with chronic or frequently recurrent urinary tract infection, Bactrim 10-day therapy outperformed ampicillin 10-day therapy by 27.2%, when comparing patients who maintained clear cultures for eight weeks. Criterion for "clear culture" was 1000 or fewer organisms/ml of urine.

While adverse reactions noted in this study were mild (e.g., vomiting, nausea, rash), more serious reactions can occur with these drugs. See manufacturer's product information for complete listing. Maintain adequate fluid intake; perform frequent CBC's and urinalyses with microscopic examination.

Note: Bactrim tablets were used in these clinical trials. Bioequivalency studies show one Bactrim DS double strength tablet is equivalent to two Bactrim tablets.

For chronic or frequently recurrent cystitis and pyelonephritis due to susceptible organisms.

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Chronic urinary tract infections evidenced by persistent bacteriuria (symptomatic or asymptomatic), frequently recurrent infections (relapse or reinfection), or infections associated with urinary tract complications, such as obstruction. Primarily for cystitis, pyelonephritis or pyelitis due to susceptible strains of *E. coli*, *Klebsiella-Enterobacter*, *Proteus mirabilis*, *Proteus vulgaris* and *Proteus morganii*.

NOTE: The increasing frequency of resistant organisms limits the usefulness of antibacterials, especially in these urinary tract infections. The recommended quantitative disc susceptibility method (*Federal Register*, 37:20527-20529, 1972) may be used to estimate bacterial susceptibility to Bactrim. A laboratory report of "Susceptible to trimethoprim-sulfamethoxazole" indicates an infection likely to respond to Bactrim therapy. If infection is confined to the urine, "Intermediate susceptibility" also indicates a likely response. "Resistant" indicates that response is unlikely.

Contraindications: Hypersensitivity to trimethoprim or sulfonamides; pregnancy; nursing mothers.

Warnings: Deaths from hypersensitivity reactions, agranulocytosis, aplastic anemia and other blood dyscrasias have been associated with sulfonamides. Experience with trimethoprim is much more limited but occasional interference with hematopoiesis has been reported as well as an increased incidence of thrombopenia with purpura in elderly patients on certain diuretics, primarily thiazides. Sore throat, fever, pallor, purpura or jaundice may be early signs of serious blood disorders. Frequent CBC's are recommended; therapy should be discontinued if a significantly reduced count of any formed blood element is noted. **Data are insufficient to recommend use in infants and children under 12.**

Precautions: Use cautiously in patients with impaired renal or hepatic function, possible folate deficiency, severe allergy or bronchial asthma. In patients with glucose-6-phosphate dehydrogenase deficiency, hemolysis, frequently dose-related, may occur. During therapy, maintain adequate fluid intake and perform frequent urinalyses, with careful microscopic examination, and renal function tests, particularly where there is impaired renal function.

Adverse Reactions: All major reactions to sulfonamides and trimethoprim are included, even if not reported with Bactrim. **Blood dyscrasias:** Agranulocytosis, aplastic anemia, megaloblastic anemia, thrombopenia, leukopenia, hemolytic anemia, purpura, hypoprotrombinemia and methemoglobinemia. **Allergic reactions:** Erythema

multiforme, Stevens-Johnson syndrome, generalized skin eruptions, epidermal necrolysis, urticaria, serum sickness, pruritus, exfoliative dermatitis, anaphylactoid reactions, periorbital edema, conjunctival and scleral injection, photosensitization, arthralgia and allergic myocarditis. **Gastrointestinal reactions:** Glossitis, stomatitis, nausea, emesis, abdominal pains, hepatitis, diarrhea and pancreatitis. **CNS reactions:** Headache, peripheral neuritis, mental depression, convulsions, ataxia, hallucinations, tinnitus, vertigo, insomnia, apathy, fatigue, muscle weakness and nervousness. **Miscellaneous reactions:** Drug fever, chills, toxic nephrosis with oliguria and anuria, periarteritis nodosa and L. E. phenomenon. Due to certain chemical similarities to some goitrogens, diuretics (acetazolamide, thiazides) and oral hypoglycemic agents, sulfonamides have caused rare instances of goiter production, diuresis and hypoglycemia in patients; cross-sensitivity with these agents may exist. In rats, long-term therapy with sulfonamides has produced thyroid malignancies.

Dosage: Not recommended for children under 12. Usual adult dosage: 1 DS tablet (double strength), 2 tablets (single strength) or 4 teasp. (20 ml) b.i.d. for 10-14 days.

For patients with renal impairment:

| Creatinine Clearance (ml/min) | Recommended Dosage Regimen |
|-------------------------------|---|
| Above 30 | Usual standard regimen |
| 15-30 | 1 DS tablet (double strength), 2 tablets (single strength) or 4 teasp. (20 ml) every 24 hours |
| Below 15 | Use not recommended |

Supplied: Double Strength (DS) tablets, each containing 160 mg trimethoprim and 800 mg sulfamethoxazole, bottles of 100; Tel-E-Dose® packages of 100. Tablets, each containing 80 mg trimethoprim and 400 mg sulfamethoxazole—bottles of 100 and 500; Tel-E-Dose® packages of 100; Prescription Paks of 40, available singly and in trays of 10.

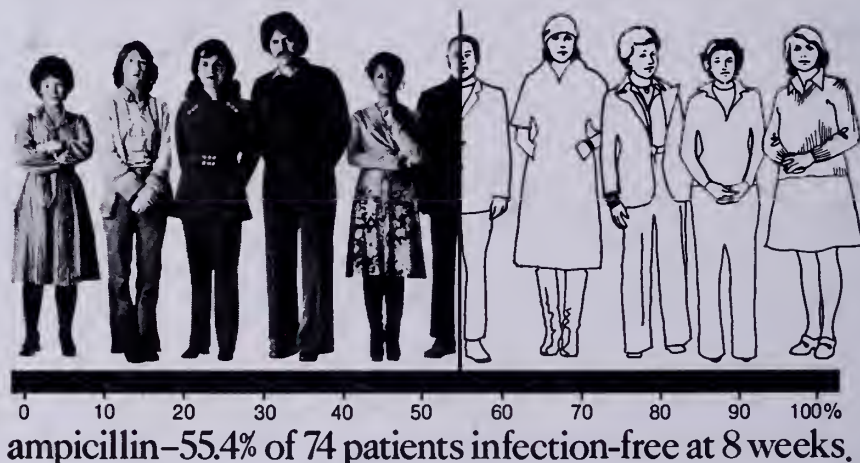
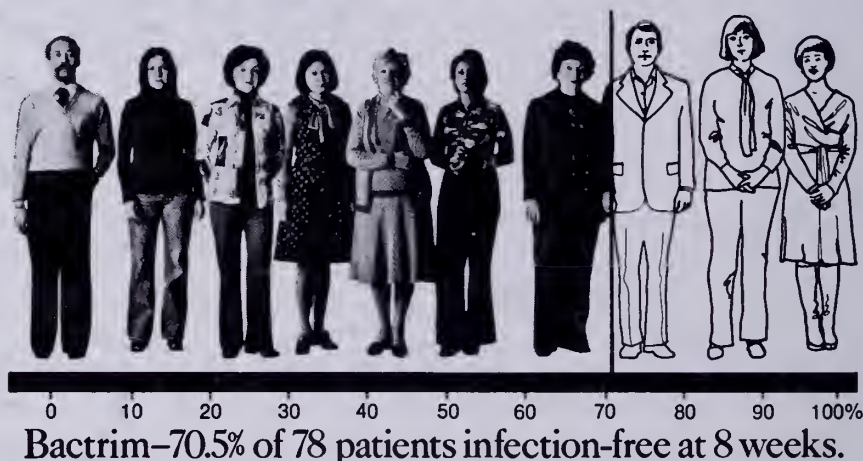
Oral suspension, containing in each teaspoonful (5 ml) the equivalent of 40 mg trimethoprim and 200 mg sulfamethoxazole; fruit-flavored—bottles of 16 oz (1 pint).



Roche Laboratories
Division of Hoffmann-La Roche Inc.
Nutley, New Jersey 07110

In a multicenter study of patients with chronic or frequently recurrent urinary tract infections

Bactrim was 27.2%* more effective than ampicillin in keeping patients infection-free for 8 weeks.†



*This percentage is arrived at by the statistical method of dividing the difference between Bactrim and ampicillin results (15.1%) by the percent of ampicillin results (55.4%).

†Data on file, Hoffmann-La Roche Inc., Nutley, New Jersey 07110

BactrimTM DS
(160 mg trimethoprim and 800 mg sulfamethoxazole)

**Double Strength tablets
Just 1 tablet B.I.D.**

Note: Bactrim tablets were used in these clinical trials. Bioequivalency studies show one Bactrim DS double strength tablet is equivalent to two Bactrim tablets.

Please see summary of product information on preceding page.

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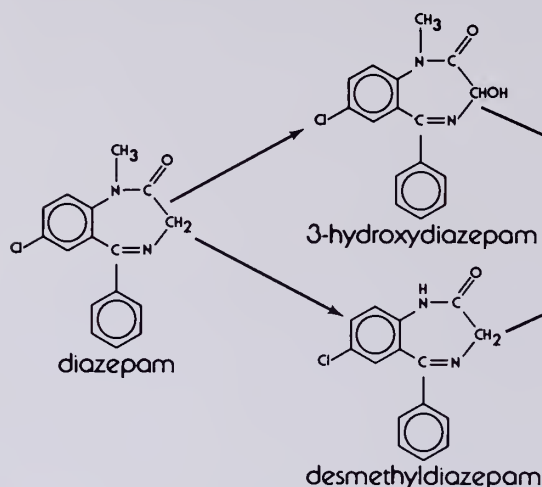
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A pharmacokinetic character all its own



Valium (diazepam) is a benzodiazepine with a distinctive pharmacokinetic profile

The pharmacokinetic profile of Valium is one of the characteristics that sets it apart from other benzodiazepines. Consider, in particular, the metabolic pathway of Valium. The three major metabolites of Valium exhibit significant pharmacologic activity—and so, of course, does the parent substance—diazepam itself. All combine to produce the characteristic clinical response seen with Valium. The response you have come to know, to want and to trust.

Pharmacokinetic studies also demonstrate that Valium has a pattern of absorption, distribution, metabolism and elimination that is reliable and consistent. And, although the pharmacokinetics of a drug cannot, at present, be specifically related to its clinical effects, it is clearly a factor that distinguishes one product from another by providing important insights into how each moves through the patient's body.

Valium® (diazepam) ^{IV}

2-mg, 5-mg, 10-mg scored tablets
**a prudent choice in psychic
tension and anxiety**

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Tension and anxiety states; somatic complaints which are concomitants of emotional factors; psychoneurotic states manifested by tension, anxiety, apprehension, fatigue, depressive symptoms or agitation; symptomatic relief of acute agitation, tremor, delirium tremens and hallucinosis due to acute alcohol withdrawal; adjunctively in skeletal muscle spasm due

to reflex spasm to local pathology; spasticity caused by upper motor neuron disorders; athetosis; stiff-man syndrome; convulsive disorders (not for sole therapy).

Contraindicated:

Known hypersensitivity to the drug. Children under 6 months of age. Acute narrow angle glaucoma;

may be used in patients with open angle glaucoma who are receiving appropriate therapy.

Warnings: Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anticonvulsant medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms (similar to those with barbiturates and alcohol) have occurred following abrupt discontinuance (convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). Keep addiction-prone individuals under careful surveillance because of their predisposition to habituation and dependence.

Usage in Pregnancy: Use of minor tranquilizers during first trimester should almost always be avoided because of increased risk of congenital malformations as suggested in several studies. Consider possibility of pregnancy when instituting therapy; advise patients to discuss therapy if they intend to or do become pregnant.

Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed; drugs such as phenothiazines, narcotics, barbiturates, MAO inhibitors and other antidepressants may potentiate its action. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.

Side Effects: Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.



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MESSAGE FROM THE PRESIDENT



THE problem of continuing medical education seems to have divided us about as much recently as any other issue. I hear all types of comments from not wanting any involvement to mandatory participation by every licensed physician in Kentucky with no licenses being renewed for those who do not fulfill such an obligation.

As in so many other of our complexities, perhaps our involvement came about because of third party talk of requirements for patient care review. Actually KMA has had a CME Committee for several years and this Committee has been interested in all physicians being exposed to new methods, new information, and new techniques that have become available since we were in medical school and residency programs. Some of you say that such exposure doesn't necessarily make us better practitioners. This may be true but if we participate with an interest in learning, I believe that it will. Some of you say that all physicians continually update their education by reading journals, listening to tapes, and keeping their specialty board requirements. This may be true for a lot of us but we have never had any documented evidence that it is and there is reason to believe that some physicians never update their training.

I believe that all physicians want to be the best practitioners they can be. I believe that periodic lectures, demonstrations, clinical pathological conferences, x-ray conferences, therapy sessions, and other medical programs improve our practice. Much of this can be gained by attending our annual scientific session but only a third of you ever attend this in a given year. There are many other opportunities at home and away for improving our practice. Let's do it for the benefit of our patients. If you already do it then take a little more time to record it when you are asked. If you don't, why not start the new year with a plan for regular participation and keep a record to present to your Association when called on to do so to show that you really do believe in continuing medical education. If we can document our participation and all of us make an effort to become better trained, there will be less thrust for mandatory participation.

Paul J. Parks



Twenty-Third Annual Symposium on Cardiovascular Diseases March 30-31, 1977



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UNIVERSITY OF LOUISVILLE HEALTH SCIENCES CENTER—LOUISVILLE, KY.

Wednesday, March 30, 1977

8:30-9:00 a.m. REGISTRATION—UL Health Sciences Center

WELCOME—Henry W. Post, M.D., President

MORNING SESSION—Nancy Flowers, M.D., Presiding

9:00 a.m. "Structure and Function of the Atrio-ventricular Junction"

THOMAS N. JAMES, M.D., Professor and Chairman, Department of Medicine, University of Alabama in Birmingham

9:40 a.m. "Evaluation of the Patient with Acquired Conduction System Disease"

KENNETH ROSEN, M.D., Professor of Medicine, Chief of Cardiology Division, University of Illinois College of Medicine

10:20 a.m. COFFEE BREAK

10:40 a.m. "Pathophysiology and Treatment of Wolff-Parkinson-White Syndrome"

KENNETH ROSEN, M.D.

11:20 a.m. "Non-Invasive Evaluation of Valvular Heart Disease"

JAMES A. SHAVER, M.D., Associate Professor of Medicine, Director, Division of Cardiology, Presbyterian University Hospital, University of Pittsburgh

12:00 noon GRAND ROUNDS

Moderated by: DANIEL E. McMARTIN, M.D., Assistant Chief, Section of Cardiology, University of Louisville School of Medicine

Panelists: THOMAS N. JAMES, M.D.; KENNETH ROSEN, M.D.; JAMES A. SHAVER, M.D.

AFTERNOON SESSION—John Wolford, M.D., Presiding

2:00 p.m. "Current Status of the Use of Porcine Valves in Man"

AMAN A. GRAY, JR., M.D., Director, Thoracic and Cardiovascular Surgery, University of Louisville School of Medicine

2:40 p.m. "The Differential Diagnosis of Systolic Murmurs"

JAMES A. SHAVER, M.D.

3:20 p.m. "Cardiogenic Reflexes and Their Clinical Significance"

THOMAS N. JAMES, M.D.

4:00 p.m.

"Hypertension Management Update—1977"

GURDARSHAN S. THIND, M.D., Director, Hypertension Unit, Section of Cardiology, University of Louisville School of Medicine

Thursday, March 31, 1977

8:30-9:00 a.m. REGISTRATION—UL Health Sciences Center

MORNING SESSION—Leonard Leight, M.D., Presiding

9:00 a.m. "The 'Non-Degrees' of Atrioventricular Block"

HENRY J. L. MARRIOTT, M.D., Director of Clinical Research, Rogers Heart Foundation, St. Petersburg, Florida; Clinical Professor of Medicine (Cardiology), Emory University School of Medicine, Atlanta; Clinical Professor of Pediatrics (Cardiology), University of Florida, Gainesville

9:40 a.m. "Current Results of Clinical Heart Transplants"

EUGENE DONG, JR., M.D., Associate Professor of Cardiovascular Surgery, Stanford University School of Medicine, Stanford, California

10:20 a.m. COFFEE BREAK

10:40 a.m. "Metabolic Support of Patients with Acute Myocardial Infarction"

CHARLES E. RACKLEY, M.D., Professor of Medicine, University of Alabama Medical Center, Birmingham

11:20 a.m. "Some Specific Aspects of the Human Heart Transplantation Program"

EUGENE DONG, JR., M.D.

12:00 noon THE BERNARD D. ROSENBLUM MEMORIAL LECTURE

"Newer Syndromes in Cardiology"

J. WILLIS HURST, M.D., Professor and Chairman, Department of Medicine, Emory University School of Medicine, Atlanta

AFTERNOON SESSION—Paul Sides, M.D., Presiding

2:00 p.m. "The Mismanagement of Arrhythmias"

HENRY J. L. MARRIOTT, M.D.

2:40 p.m. "The Place of Nitrates in Congestive Heart Failure"

CHARLES E. RACKLEY, M.D.

3:20 p.m. "The History of the History"

J. WILLIS HURST, M.D.

This program is acceptable for 11 prescribed hours by the American Academy of Family Physicians . . . ALSO As an organization accredited for continuing medical education, the University of Louisville School of Medicine certifies that this continuing medical education offering meets the criteria for 11 credit hours in Category I of the Physician's Recognition Award of the AMA, provided it is used and completed as designed.

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FEBRUARY

- 16 "Differential Diagnosis of Dysphagia,"** PCP Series, Health Sciences Center, Louisville
- 20-26 Seventh Family Medicine Review,* University of Kentucky Medical Center, Lexington
- 22 "Respiratory Therapy in the Intensive Care Unit," 7 p.m., sponsored by Letcher County Medical Society, Whitesburg Appalachian Regional Hospital, Whitesburg
- 23 "Adult Respiratory Distress Syndrome," Louisville Area CME Consortium, Health Sciences Center, Louisville
- 24-25 Breast Cancer Management Symposium and Workshop, University of Louisville School of Medicine, Stouffer's Inn, Louisville
- 26 13th Annual Symposium on Oropharyngeal Cancer, Health Sciences Center, Louisville

MARCH

- 1-4 Second Annual Kentucky Conference on Drug Program Issues, Stouffer's Louisville Inn, Louisville
- 2 "Symposium on Critical Orthopedic Diagnosis,"** Health Sciences Center, Louisville
- 5 "Joint Practice: Now and In The Future," seminar sponsored by KMA-KNA Joint Practice Committee, Ramada Inn-Bluegrass Convention Center, Louisville
- 16 "Manifestation of Rheumatoid Arthritis,"** Health Sciences Center, Louisville
- 17-18 Sixth Medical Aspects of Sports Seminar, Executive Inn, Louisville
- 21-25 "Practical Microsurgery," University of Louisville Department of Surgery, Health Sciences Center, Louisville
- 23 "Snake Bites and Allergic Reactions to Insect Stings,"** Louisville Area CME Consortium, Health Sciences Center, Louisville
- 28 W. O. Johnson Lecture,** Health Sciences Center, Louisville
- 30-31 23rd Annual Heart Symposium on Cardiovascular Diseases, Health Sciences Center, Louisville

APRIL

- 6 "Current Aspects of Atherosclerotic Heart Disease,"** PCP Series, Health Sciences Center, Louisville
- 7 22nd Annual Clinical Conference, "Newer Approaches to Allergic Disorders," Lexington Clinic, Lexington
- 15 Fifth Annual C. Dwight Townes Memorial Seminar,** Health Sciences Center, Louisville
- 15-16 "Endocrinology for the Practicing Physician,"* Fee: \$75. University of Kentucky Medical Center, Lexington
- 20 "New Concepts in Infertility,"** PCP Series, Health Sciences Center, Louisville
- 21-22 "The Menopausal Syndrome: Physiology and Therapy,"* Fee: \$100. Hyatt Regency, Lexington
- 26-27 "Establishing Yourself in Medical Practice" Workshop for Senior Residents, Ramada Inn-Bluegrass Convention Center, Louisville
- 27 "Metabolic Bone Disease,"** Louisville Area CME Consortium, Health Sciences Center, Louisville
- 28-May 2 Modern Management of Major Problems in Surgery, University of Louisville Department of Surgery, Galt House, Louisville
- 28-30 Third Postgraduate Course in High Risk Pregnancy,** Health Sciences Center, Louisville

IN SURROUNDING STATES

MARCH

- 16 Symposium on the Small Child, Kettering Center, 140 E. Monument St., Dayton (For further info: D. Methven Cathro, M.D., Children's Medical Center, 1735 Chapel St., Dayton, Ohio 45404.)
- 16-18 "Endocrine Causes of Menstrual Disorders," University of Tennessee College of Medicine, Hilton Inn, Memphis (For further info: Division of Continuing Education, University of Tennessee Center for Health Sciences, 800 Madison Avenue, Memphis, Tennessee 38163.)

1977

MARK YOUR CALENDAR

- May 25-26, KMA Emergency Health Care Seminar, Louisville
- June 18-23, AMA Annual Convention, San Francisco
- September 27-29, KMA Annual Meeting, Louisville

*For further information, contact: Frank R. Lemon, M.D., Associate Dean for Continuing Education, University of Kentucky College of Medicine, Lexington 40506

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See next page for brief summary.

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No. 2

Visceral Larva Migrans (Toxocariasis)

JOSEPH A. BURKE, M.D.*
Lexington, Kentucky

Visceral larva migrans, a syndrome with a variety of clinical manifestations, is frequently not recognized. It should be considered in any child with exaggerated eosinophilia.

BEAVER and his colleagues in 1952 introduced the term visceral larva migrans (VLM) to describe an infection of young children resulting from invasion of their viscera by second stage larvae of *Toxocara canis*. The syndrome was characterized by persistent eosinophilia, hepatomegaly, pulmonary symptoms, and a history of geophagia. It has since been shown that VLM (toxocariasis) may be associated with a spectrum of clinical manifestations. For example, some children have marked, persistent eosinophilia without additional signs or symptoms; others without eosinophilia, present with symptoms and findings localized to an eye.

Toxocara canis, a common roundworm of the dog, is the major cause of VLM. It has been suggested that the larvae of other animal ascarids, especially *Toxocara cati* (the cat roundworm), occasionally cause VLM in man.

The purpose of this report is to review the life cycle of *Toxocara canis* and to describe the epidemiology, clinical features, diagnosis and treatment of visceral larva migrans.

Life Cycle of *Toxocara canis*

The normal habitat of adult *Toxocara canis*

is the lumen of the small intestine of the dog, their natural host. Each gravid female worm deposits thousands of eggs per day into the host's feces. In moist soil the eggs embryonate and become infective in several weeks. When infective eggs are ingested, they pass through the stomach and second stage larvae are released in the small intestine. In **puppies** less than six months of age, the larvae penetrate the intestinal mucosa, enter the portal circulation, are carried to the liver and thence to the right heart and lungs. They break out of the pulmonary capillaries into the alveoli, ascend the respiratory tract to the pharynx, are swallowed, pass to the small intestine, and mature into adult worms. In **adult dogs**, the second stage larvae do not usually complete their life cycle or re-enter the intestinal tract; instead, they encyst in various somatic tissues. These dormant larvae in the viscera of bitches become stimulated during pregnancy and migrate to and through the placenta into the unborn puppies. Shortly after birth, the larvae migrate from the newborn pup's lungs to the intestinal tract where they mature into adult worms. Prenatal infection is the primary mode of transmission of toxocariasis in dogs. Nursing bitches ingest feces passed by their suckling puppies. *Toxocara* ova ingested in this manner pass through the bitch unchanged because a two- to three-week incubation period in soil is required before the eggs become infective. Puppies and their mothers are the major disseminators of *Toxocara* ova. Nursing bitches may ingest third stage larvae shed by heavily infected puppies; such larvae develop directly into adult worms in the intestine of the nursing bitch.

Man, an accidental host, acquires toxocariasis

*Assistant Professor of Pediatrics, University of Kentucky Medical Center, Lexington
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by ingesting soil that contains infective *Toxocara* eggs. The second stage larvae hatching from these eggs bore into the intestinal mucosa and are carried by the blood stream to the liver and thence to the lungs and other organs. The disseminated larvae migrate for a variable period of time through the viscera leaving linear tracts of eosinophilic infiltration in their wake. Eventually they become immobile and are enveloped in eosinophilic granuloma. In aberrant hosts such as man, second stage *Toxocara* larvae do not mature or complete their life cycle. This lack of maturation is evidenced by the absence of adult *Toxocara* worms and their eggs in the feces of patients with VLM.

Epidemiology

Toxocara canis, a common parasite of the dog, is ubiquitous (Table 1). Puppies are particularly dangerous because infection is acquired prenatally and mature egg-laying worms may be present in up to 100% of untreated puppies from as early as three weeks of age. In the United States there are 40 million owned dogs; it is estimated that 20% are infected with *Toxocara canis*. A prevalence of toxocariasis in dogs in excess of 7% constitutes a health hazard to man. The large reservoir of infected dogs; the widespread often indiscriminate disposal of pet feces in children's play areas; the hardiness of infective ova in soil; and the small number of ova necessary to produce disease are factors which account for the frequent occurrence of VLM in children.

Pathogenesis

The clinical manifestations and histopathologic findings result from tissue damage caused by migrating second stage larvae and the host's allergic, inflammatory reaction to the parasite. Factors related to the severity of clinical disease include the number of infective eggs ingested, the frequency of reinfection, the underlying tendency of an individual to hypersensitivity and whether or not larvae invade organs where their presence is evident clinically.

Clinical Manifestations

Visceral larva migrants occurs mainly in children one to four years of age. Boys are affected twice as often as girls. There is usually a history of dirt eating and frequently a close association with dogs and/or cats. Hypereosinophilia of the blood may be the only finding in mild asymptomatic cases.

Table 1
PREVALENCE OF *TOXOCARA CANIS* IN DOGS

| Country | Number of Dogs | % of Dogs with Parasite |
|------------------------|----------------|-------------------------|
| India (Calcutta) | 100 | 83 |
| Philippines (Manila) | 81 Puppies | 77 |
| Australia (Brisbane) | 29 Puppies | 100 |
| | 35 Adults | 9 |
| Great Britain (London) | 300 | 21 |
| Italy | 225 | 79 |
| Germany | 1642 | 11 |
| Malta | 52 | 28 |
| Nigeria | 72 | 38 |
| Mexico (Mexico City) | 120 Puppies | 93 |
| Canada (Montreal) | 155 | 53 |
| USA | | |
| Columbus | 53 Puppies | 98 |
| New York City | 500 | 2 |
| New Orleans | 170 | 8 |
| Indiana | 1465 | 21 |
| Kentucky | 90 | 44 |

Asymptomatic infections are probably much more common than clinically apparent illnesses but information on this point is not available because of the lack of a reliable skin test or a sensitive, specific serological assay. The "classical" symptomatic case is characterized by leukocytosis, marked and persistent eosinophilia of the blood, hypergammaglobulinemia and hepatomegaly (Table 2). Fever and pulmonary manifestations, i.e., cough, wheezing, rales, and non-specific pulmonary infiltrates are other common features. Frequent, non-specific symptoms and signs include pallor, malaise, irritability, anorexia, weight loss, and abdominal distention. Tender nodules on the palms and soles, erythema nodosum, urticaria, and purpura are skin lesions that have been reported. A variety of neurological manifestations have been described including focal or generalized seizures, acute infantile hemiplegia, and behaviour disorders. The neurological syndromes may be associated with eosinophilic pleocytosis of the cerebrospinal fluid. The finding of *Toxocara* larvae and/or eosinophilic granuloma within the central nervous system of autopsied cases suggests that the neurological disturbances are caused by direct invasion of the nervous system by larvae. *Toxocara* larvae occasionally reach an eye via the retinal circulation. The inflammatory reaction to intraocular *Toxocara* results in either a focal lesion in the form of a retinal granuloma or a generalized lesion in the form of diffuse endophthalmitis. Ocular toxocariasis is often mistaken for a retinoblastoma, a malignant tumor which requires removal of the eye. The natural history of ocular toxocariasis is towards resolution of the inflammatory mass leaving a residual

scar and a degree of blindness that depends on the size of the scar and its nearness to the macula. Ocular toxocariasis is nearly always unilateral, generally occurs in children over four years of age, and is not associated with systemic signs of VLM. Peripheral eosinophilia is mild (6 to 12%) or absent. The presenting complaints are squint, defective vision, and/or leukocoria, i.e., a white mass is seen through the pupil.

The prospect for complete recovery from the systemic signs of VLM in symptomatic cases within a period of 6 to 18 months is good if further infection is prevented. Deaths attributed to severe pulmonary disease, myocarditis, and/or encephalitis have been reported but are unusual. Of continuing concern, even after all other systemic manifestations have disappeared, is the possibility of larval invasion of an eye and the consequent loss of vision.

Leukocytosis and marked eosinophilia are the most frequent laboratory abnormalities. The white cell count varies from 12,000 to 120,000 cells per mm³ with eosinophils making up 30 to 90% of the leukocytes. A diagnosis of VLM is doubtful with an eosinophilia of less than 30%. Another notable feature of the eosinophilia is its chronicity. It persists for more than one year in asymptomatic infection produced by a single,

small dose of infective ova. The eosinophils demonstrate a variety of morphologic abnormalities, including sparsity and uneven distribution of granules, variation in eosinophilic staining qualities, and cytoplasmic vacuoles. Microcytic hypochromic anemia secondary to iron deficiency is common. The concentration of serum albumin is normal or slightly decreased whereas the gamma-globulins especially IgM, IgE, and IgG are elevated. The sedimentation rate is usually elevated. Children with *Toxocara* infection produce antibodies which react not only with the infecting parasite but also with blood group substances A and/or B. Isohemagglutin titres over 1:256 are noted in two-thirds of patients. The heterophile titre is often elevated; the antibody is completely removed with beef erythrocytes suggesting similarity to the so-called Forsmann antibody.

Pathology

The initial histopathologic reaction to *Toxocara* larvae is characterized by sharply circumscribed aggregates of inflammatory cells, mainly eosinophils. Later, eosinophilic granuloma develop. Granuloma formation is most prominent in the liver but has been observed in almost every organ of the body. Well developed granuloma consist of a central area of fibrinoid necrosis surrounded by palisaded epithelioid cells and foreign body giant cells, and a dense infiltrate of eosinophils, lymphocytes, and plasma cells. There is fibroblastic proliferation peripherally delimiting the granuloma from adjacent tissue. The central region may or may not contain an intact or degenerating larvae. Random tissue sections seldom reveal larvae; hundreds of sections may have to be examined before one is identified. In tissue sections, larvae of *Ascaris lumbricoides*, *Strongyloides stercoralis*, and *Ancylostoma caninum* are distinguishable from each other and from second stage *Toxocara* larvae by features seen in transverse sections at the level of the mid-intestine.

Diagnosis

The diagnosis of VLM is usually presumptive, i.e., it is based upon clinical features. Definitive diagnosis requires identification of *Toxocara* larvae in tissue specimens. The liver is the most frequently involved organ and is readily accessible for biopsy; generally a liver biopsy is performed if a definitive diagnosis is desired. Only occasionally is it necessary to attempt to confirm the diagnosis by liver biopsy.

Table 2

CLINICAL MANIFESTATIONS IN VISCERAL LARVA MIGRANS
(% Cases)

| | Huntley ¹ (51 Cases) | Snyder ² (20 Cases) |
|--|------------------------------------|-----------------------------------|
| Age in months | | |
| 12-23 | 29 | 40 |
| 24-35 | 35 | 55 |
| 36-47 | 18 | 0 |
| 48 + | 18 | 5 |
| Pica | 90 | 100 |
| Cough and/or wheezing | 86 | 20 |
| Fever | 80 | 55 |
| Hepatomegaly | 65 | 85 |
| Leukocytosis | | |
| > 10,000/mm ³ | 100 | 95 |
| > 20,000/mm ³ | 55 | 40 |
| > 50,000/mm ³ | NS* | 30 |
| Eosinophilia ⁺ | 100 | 100 |
| Anemia (< 11 g/dl) | NS* | 80 |
| Hypergammaglobulinemia | 60 | 63 |
| Elevated isohemagglutinins | 66 | NS* |
| Pulmonary infiltrate(s) on chest roentgenogram | NS* | 41 |

* NS = not stated

+ Eosinophilia of 30% or more was considered essential for diagnosis in both studies.

1. Huntley, C.C., Costas, M.C. and Lyerly, A.: Visceral larva migrants syndrome: Clinical characteristics and immunologic studies in 51 patients. *Pediatrics* 36:523-536, 1965.
2. Snyder, C.H.: Visceral larva migrants: Ten years' experience. *Pediatrics* 28:85-91, 1961.

Serologic tests for VLM can be obtained by sending the patient's serum to the Center for Disease Control in Atlanta, Georgia. Unfortunately, these tests are neither very sensitive (negative results are obtained in as many as 60% of "classical" cases) nor are they very specific (antigenic extracts of *Toxocara* and *Ascaris lumbricoides* cross-react extensively). Skin tests are of little value and may be misleading. A number of research groups are working on an enzyme-linked immunosorbent assay (ELISA); it shows promise as a useful diagnostic test for the future.

Differential Diagnosis

The number of syndromes associated with exaggerated eosinophilia is limited (Table 3). By far the most common cause in children is VLM. The "idiopathic hypereosinophilic syndrome" is characterized clinically by mitral insufficiency, congestive heart failure, and pulmonary infiltrates; pathologically by infiltration of the viscera with mature eosinophils; and hematologically by an eosinophilic leukemoid reaction. The peripheral eosinophils are mature and there is no disturbance of eosinophilic maturation in bone marrow aspirates. Eosinophilic leukemia differs from the aforementioned syndromes in that myeloblasts and eosinophilic myelocytes are observed in peripheral blood, bone marrow, and organ infiltrates.

A number of conditions generally associated with moderate eosinophilia, may on occasion, provoke an exaggerated eosinophilic response. Infrequently, eosinophilic leukemoid reactions occur in trichinosis, ascariasis, hookworm disease, and strongyloidiasis. Eosinophilia is most marked during the stage of larval migration through the lungs. Eggs, larvae, or adult worms may not be found in feces at the time of maximal eosinophilia. Rarely, Hodgkin's disease, periarteritis nodosa, and drug hypersensitivity are associated with striking eosinophilia.

Table 3
CAUSES OF EXAGGERATED EOSINOPHILIA*

| |
|---|
| Visceral larva migrants |
| Idiopathic hypereosinophilic syndrome |
| Eosinophilic leukemia |
| Disorders generally associated with moderate eosinophilia |
| Trichinosis, hookworm disease, ascariasis, strongyloidiasis, Hodgkin's disease, Periarteritis nodosa, drug hypersensitivity |

* Eosinophilia of 30% or more

Treatment

Prevention is the best treatment. The public should be informed regularly of the health hazard associated with indiscriminate disposal of dog feces in children's play areas. The need for monthly deworming of puppies up to six months of age should also be publicized. Older dogs need to be checked regularly for parasites and treated when an infection is found.

Children with VLM should be prevented from eating dirt and removed from their source of infection. Asymptomatic cases require no therapy other than prevention of reinfection. Thiabendazole has been reported to be beneficial in symptomatic cases. I treat symptomatic VLM with thiabendazole, 25 mg per kg body weight twice daily for 7 to 10 days. The treatment is often repeated after a four-week interval. Headache, nausea, vomiting, dizziness, and drowsiness, side effects caused by thiabendazole, are uncommon in children. A short course of corticosteroids may be life-saving for the occasional child with severe pulmonary disease. Oral iron therapy is indicated when *Toxocara* infection is associated with iron deficiency anemia.

There is no effective treatment for ocular toxocarasis. An eye with toxocaral endophthalmitis is frequently removed because the lesion is mistaken for a retinoblastoma.

Complete bibliography furnished upon request.

Capsaicin Induced Acute Erosive Gastritis: Its Prevention by Antacid, Metiamide and Cimetidine†

N. S. MANN, M.D.*
Louisville, Kentucky

Capsaicin, the active principle of capiscum (hot pepper), in a dose of 100 mg/kg when given by esophageal intubation to rats, produced acute erosive gastritis. The acute gastric injury could be prevented by the prior administration of Mylanta II, metiamide, or cimetidine. Pertinent literature has been briefly reviewed.

CAPISCUM or chili is an important ingredient of food, especially in the tropics where it is used in conjunction with other spices and condiments. It is the principal component of various types of curries. Capsaicin is the pungent material present in the fruit of various species of capiscum (the genus of hot pepper). It has been suspected of having a laxative action and also of causing gastric erosions. The mechanism whereby it produces gastric injury is not known. It is shown to increase gastric acid secretion in humans and possibly to cause disruption of the gastric mucosal barrier. The present study was designed to find out if capsaicin, given by esophageal intubation to rats, would produce acute gastric erosions. The possibility of preventing such erosions by prior administration of Mylanta II (antacid) or metiamide or cimetidine (H_2 receptor antagonists which inhibit gastric acid production) was also investigated.

Methods

Male albino rats weighing 150-200 gms were fasted overnight. Capsaicin (CP) suspended in 1% methyl cellulose (MC) in a dose of 100

mg/kg was given by esophageal intubation in four equally divided doses one hour apart. Some of the animals (Table 1) received Mylanta II (MY) one cc every hour for four doses; Mylanta was given 15 minutes before the dose of capsaicin. Other groups of animals received metiamide (MT) or cimetidine (CT) 4 mg/kg in four equally divided doses one hour apart. Like Mylanta II, metiamide and cimetidine were also given 15 minutes before the dose of capsaicin. Animals receiving methyl cellulose alone, mylanta alone, metiamide alone, or cimetidine alone, served as controls. One hour after the last dose, rats were sacrificed by an overdose of ether. Their stomachs were removed and cut open along the lesser curvature. The number of erosions were counted and specimens were preserved in 10% formalin. Sections from selected areas were stained with hematoxylin and eosin for histologic study.

Table 1
CAPSAICIN INDUCED ACUTE EROSION GASTRITIS
(10 Rats in each group)

| Test Material | Total Number of Erosions | Mean \pm S.E.M. |
|---------------|--------------------------|-------------------|
| MC 1% | 0 | 0 |
| CP | 31 | 3.1 \pm .140 |
| MY | 0 | 0 |
| MT | 0 | 0 |
| CT | 0 | 0 |
| CP + MY | 0 | 0 |
| CP + MT | 0 | 0 |
| CP + CT | 0 | 0 |

Results

Capsaicin, when given by esophageal intubation, produced acute gastric erosions in rats (Fig. 1). Some of the erosions were found to be actively bleeding. On microscopic examination, superficial mucosal necrosis and submucosal congestion was seen (Fig. 2). Mylanta II, metiamide, and cimetidine all protected the gastric mucosa against capsaicin induced gastric injury (Table 1). There was no difference between Mylanta II, metiamide, and cimetidine in this respect.

†From the Medical Service, Digestive Disease Section (Gastroenterology), V.A. Hospital and University of Louisville School of Medicine, Louisville; Supported by V.A. Research Service

*Chief of Gastroenterology, V.A. Hospital; Assistant Professor of Medicine, University of Louisville School of Medicine, Louisville



FIG. 1. Stomach of Group II rat showing gastric erosions and bleeding.

Discussion

The fruit of several species of capiscum (genus of hot pepper), e.g. *Capiscum frutescens*, *C. minimum*, and *C. grossum*, etc., is an important constituent of various condiments and curries. Excessive ingestion of capiscum in the diet of various ethnic groups is suspected of causing gastrointestinal problems. It has been implicated in the causation of acute erosive gastritis and also has a laxative effect. Capsaicin is the pungent material present in the fruit of capiscum. It has been used as a rubefacient, counter-irritant, anodyne, and carminative. The mechanism of gastric injury by capsaicin is not known, but may be similar to drug induced or bile induced acute erosive gastritis viz. disruption of the gastric mucosal barrier and back diffusion of hydrogen ions. It can cause increased gastric acid secretion in humans. In the present study, capsaicin produced acute erosive gastritis, and the severity and type of gastric injury was found to be similar to drug induced experimental acute erosive gastritis reported before. In the evaluation of gastrointestinal symptoms, consideration should be given to the role played by spices and condiments, especially capiscum. Local effect of capiscum on

gastric mucosa has been documented by fiberoptic gastroscopy. In the hands of experienced endoscopists, fiberoptic endoscopy is a safe and useful procedure, and should be used in the evaluation of diet induced gastrointestinal problems.

The effects of histamine are mediated by two types of receptors. Histamine H_1 receptors can be blocked by conventional antihistaminic drugs. H_2 receptors, which mediate gastric acid secretion are blocked by buriamide, metiamide, and cimetidine. Cimetidine and metiamide can inhibit the basal, nocturnal, and pentagastrin stimulated secretion of gastric acid in gastric and duodenal ulcer patients and in cases of Zollinger-Ellison Syndrome. Metiamide has been found to be effective in inhibiting gastric acid secretion in dogs and rats. The presence of gastric acid seems to be necessary for the occurrence of gastric erosions and "stress" ulceration. Metiamide effectively prevented "activity-stress" ulcer in rats. Antacids, metiamide and cimetidine can prevent bile and drug induced acute erosive gastritis. In the present study, Mylanta II, metiamide and

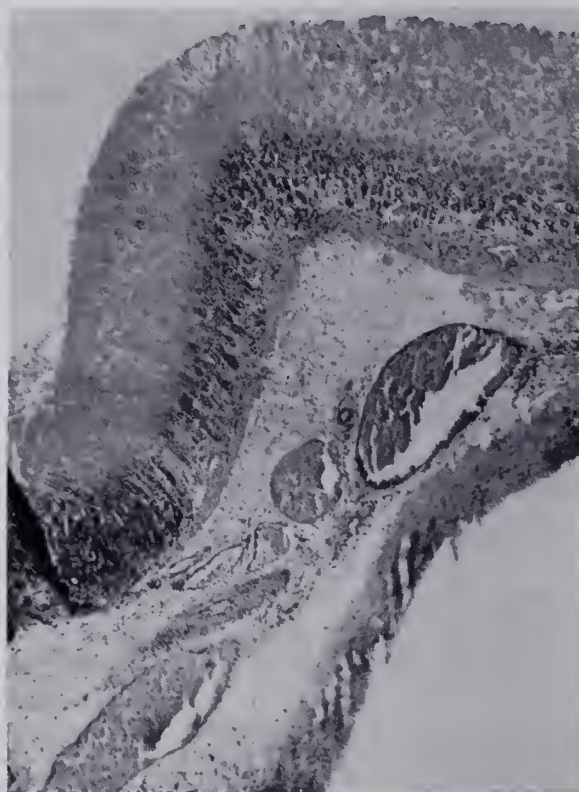


FIG. 2. Section of Group II rat stomach showing superficial mucosal necrosis and submucosal congestion. H&E X 65.

cimetidine effectively prevented capsaicin induced acute gastric injury. In the reported literature there have been mentioned some differences between the actions of metiamide and cimetidine. In the Heidenhain pouch dog model, metiamide did not affect the gastric mucosal barrier, but the gastric acid inhibition was always associated with reduction in mucosal blood flow. Cimetidine has been shown to increase gastric

potential difference and may have a protective effect on the gastric mucosal barrier in addition to suppression of acid secretion. Metiamide, probably because of its thio urea moiety, has caused neutropenia; such neutropenia has not been encountered with cimetidine; in fact, metiamide induced neutropenia has reversed during treatment with cimetidine.

Complete bibliography furnished upon request.

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GRAND ROUNDS



University of Louisville School of Medicine

This Journal feature will be presented alternately by the University of Louisville and the University of Kentucky Departments of Medicine and Departments of Surgery. We hope to have these features revolve around subjects of immediate practical interests to the practicing physician; and, for those of us not able to attend grand rounds in the teaching centers as often as we might, we hope this will represent a bit of a refresher course.

Constrictive Pericarditis Following Mediastinal Radiation Therapy*

In recent years, an increasing number of patients with neoplastic disease have received aggressive radiation therapy to the mediastinum. Following this therapy as many as 30% of patients develop pericarditis with effusion, which may later severely compromise cardiovascular function because of constriction and/or tamponade. In a retrospective study, Martin et al¹ found either transient or persistent pericardial effusion in 24 of 81 patients with Hodgkin's disease, Stages I-III B, who underwent upper mantle radiation. Five of the 24 patients eventually required pericardiectomy for signs and symptoms of cardiac tamponade. Most of the retrospective studies of heart disease following radiation therapy demonstrate an increased incidence of cardiac involvement following high doses (over 4,000 rads) to the mediastinum^{2,3}; however, acute pericarditis,³⁻⁶ restrictive disease, and even myocardial infarctions^{7,8} have occurred with a total dose of less than 4,000 rads.

Case Report

A 22-year-old woman presented to Trover Clinic, Madisonville, Kentucky, on February 13, 1974 with a one-month history of intermittent cough. Chest x-ray film showed an anterior mediastinal mass. The diagnosis of Hodgkin's disease was established with supraclavicular lymph node biopsy, and laparotomy established the process

Stage II A. Electrocardiogram (EKG) at this time was normal.

A total dose of 4,000 rads over 28 days was administered to the mediastinum through anterior and posterior ports. An additional 4,000 rads were given to the abdomen because of the size (7 cm) of the mediastinal mass. At the completion of therapy, the patient returned home and was seen at monthly intervals. During the three months following radiation therapy, she developed radiation pneumonitis which cleared except for some apical infiltrate in the left chest. Within the next month, the patient began to complain of pain in the neck and over both shoulders.

On January 1, 1975, she presented with acute onset of sharp, constant substernal chest pain radiating to the neck. Minimal rales were present in the left chest. She denied dyspnea, orthopnea, pedal edema, or easy fatigability. No Kussmaul's sign was seen but a paradoxical pulse of 4 mm was present. The right external jugular vein was distended 6 to 8 cm at 20 degrees. A Grade II/VI three-component pericardial rub was present. EKG demonstrated low voltage. Review of serial chest films at this time disclosed a gradual increase in cardiothoracic ratio from 11.5/26 on February 13, 1974, to 16.5/25 on January 3, 1975 (Fig 1-4). Carbon dioxide injection allowed visualization of a 5.7-mm pericardial thickening over the right atrium without evidence of tamponade. The chest pain subsided with administration of 10 grains aspirin q.i.d., and the patient was discharged home. Because of increasing chest pain with fever, exertional dyspnea, paroxysmal nocturnal dyspnea, and orthopnea, the patient was re-admitted January 24, 1975. Paradoxical pulse had increased to 10-14 mm.

*From the Departments of Surgery, Trover Clinic and Hopkins County Hospital, Madisonville, Kentucky, and the University of Louisville School of Medicine, Louisville, Kentucky. Reprint requests should be addressed to the Department of Surgery, the University of Louisville School of Medicine, Health Sciences Center, Louisville, Kentucky 40201.

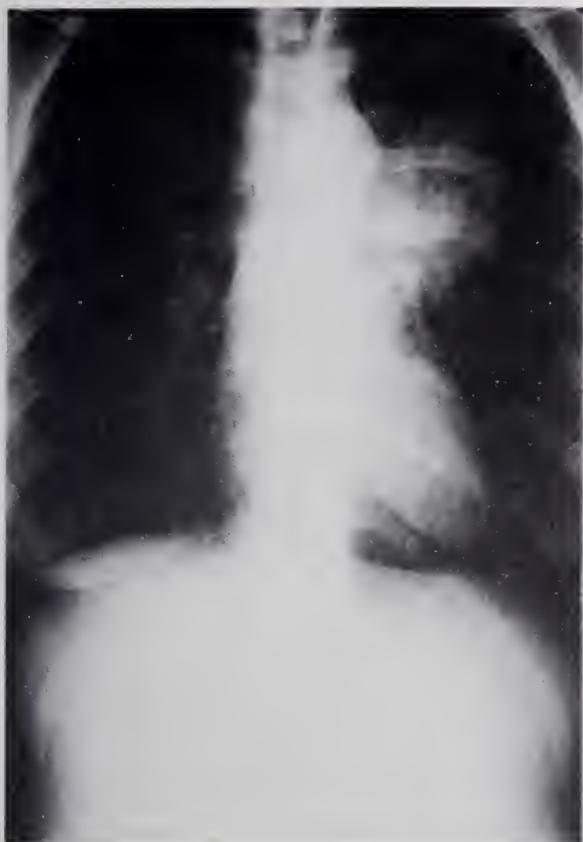


FIG. 1. Serial chest x-ray films show a gradual increase in cardiothoracic ratio. The initial chest film illustrates mediastinal Hodgkin's disease.



FIG. 2. Chest film one month after radiation therapy.

An early Kussmaul's sign and S_3 gallop had developed. EKG showed continued low voltage with T-wave flattening. At cardiac catheterization, pressures were consistent with restrictive disease and some degree of tamponade (Fig 5).

On January 30, 1975, a subtotal pericardiectomy was performed through a midline sternotomy incision. Thickened pericardium was gently stripped from the left and then the right side of the heart. The pericardial peel varied in thickness from 0.5 cm to 2 cm. The surface of pericardium had a fibrinous exudate. On microscopic examination, fibrotic reaction predominated. The patient is presently asymptomatic 15 months after pericardiectomy with no recurrence of Hodgkin's disease (Fig 6).

Discussion

At operation or autopsy, thickened pericardium with gross evidence of fibrosis is a common finding of radiation pericarditis. In 1925 Schweizer⁹ reported microscopic evidence of destruction of the sarcolemma and globular breakdown of the myoplasm followed by emptying

of the contents. This has been substantiated by electron microscopy. Burch and associates¹⁰ found extensive disorganization of mitochondria, myofibril, nucleus, and sarcolemma. Fajardo and Stewart¹¹ studied the effects of radiation on the hearts of 91 rabbits and found that the endothelial cells of blood capillaries suffer the most significant lesions, varying from luminal projections of cytoplasm to cell necrosis with rupture of the capillary walls. Most of these lesions are "silent" and occur 2 to 70 days after radiation. No animal was asymptomatic during this time. Compensatory renewal of endothelial cells was inadequate to replace damaged capillaries, with resultant myocardial ischemia. Both Burch and Fajardo et al point out that no pathologic lesion found thus far is specific for radiation damage.

Mediastinal involvement of the tumor increases the likelihood of pericardial effusion and acute pericarditis. Maximov in 1923¹² noted an increase in radiation effect on inflamed tissue and tissue immediately adjacent to inflamed tissue. In a series of 27 patients who developed pericardial effusions following mediastinal irradiation, 21 had mediastinal Hodgkin's disease.¹³ Cohn and

colleagues² described two patients with massive mediastinal involvement of Hodgkin's disease. Both developed acute pericarditis during initial radiation therapy: one after 1,500 rads and the other after 3,100 rads total doses. Other reports localize the tumor to the mediastinum.^{6,9,14,15}

Most patients present with acute onset of chest pain associated with fever and dyspnea. On physical examination, an elevated venous pressure and pericardial friction rub are usually present.² Early recognition of tamponade and constrictive heart disease is important in preventing fibrosis and death.^{2,3,13,16}

A review of serial chest films will often reveal a gradual increase in transverse cardiac diameter. Pierce et al¹⁷ consider any variation of 1.5 cm or more from the greatest pretreatment transverse cardiac diameter as significant. Carbon dioxide injection studies² and angiocardiography^{3,18} can be done to demonstrate pericardial effusion and thickening. Right heart catheterization with pressures from the pulmonary capillary wedge position, main pulmonary artery, right ventricle, and right atrium can establish the diagnosis of constriction and tamponade.

Initial treatment with anti-inflammatory

agents, such as aspirin, indomethacin, and steroids, is useful in alleviating acute symptoms.^{2,4,14,19,20} However, a high incidence of dependency and side effects has resulted with steroid therapy.^{4,15} In a recent report, Keelan and Ruders²¹ strongly advocate the use of steroids based on the dramatic response in one patient who had 84% eosinophils in the thoracentesis fluid. They postulated that the pericarditis present may have been an allergic manifestation to radiation. All the larger series, however, report a predominance of lymphocytes in the pericardial fluid.^{1,2,18,22}

The treatment most frequently advocated for pericarditis following radiation therapy is (1) administration of anti-inflammatory agents for relief of acute symptoms with close surveillance and (2) pericardiectomy for tamponade and/or restrictive disease.^{1,2,5,18,19} Pericardiectomy should be carried out at the first sign of constriction or tamponade. Kagan and Morton and their respective associates^{3,13,16} strongly advocate pericardiectomy in all symptomatic patients and in all patients with effusions which show both an increase in transverse cardiac diameter of 5 cm or more and which persist for more than five

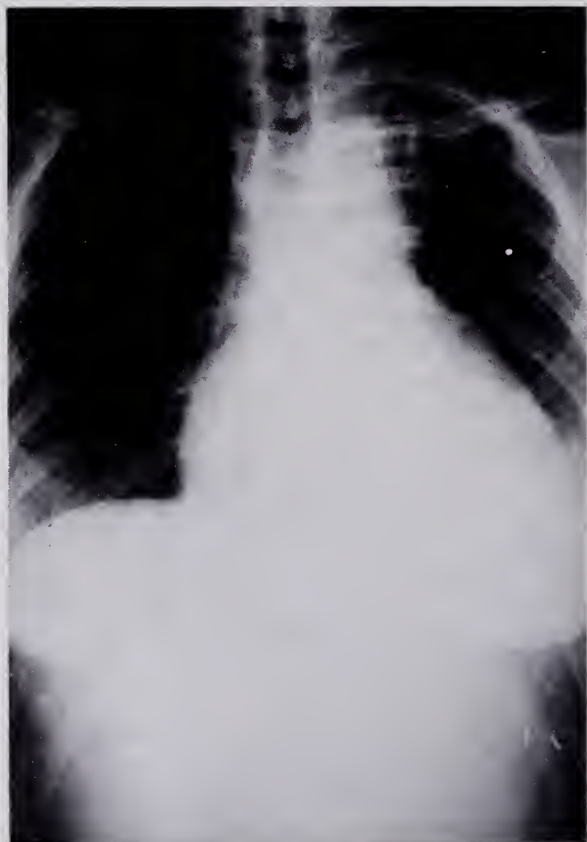


FIG. 3. Chest film 11 months after radiation therapy.



FIG. 4. Chest film one year after radiation therapy.



FIG. 5. Cardiac catheterization shows pericardial effusion. Pressures were consistent with restrictive disease and some degree of tamponade.

months. Among 11 pericardiectomies, they report two complications: postoperative bleeding and left phrenic nerve paralysis following unintentional division of a phrenic nerve.

Despite the use of more specific, relatively low dose radiation therapy, radiation pericarditis continues to pose a hazard to the patient whose primary neoplastic process had been palliated or even possibly cured.

MARY ANN COFFEE, M.D.

JACK L. HAMMAN, M.D.

References

1. Martin RG, Ruckdeschel JC, Chang P, et al: Radiation-related pericarditis. *Am J Cardiol* 35:216-220, 1975.
2. Cohn KE, Stewart JR, Fajardo LF, Hancock EW: Heart disease following radiation. *Medicine* 46:281-298, 1967.
3. Morton DL, Kagan AR, Roberts WC, et al: Pericardiectomy for radiation-induced pericarditis with effusion. *Ann Thorac Surg* 8:195-208, 1969.
4. Connolly DC, Burchell HB: Pericarditis: a ten year survey. *Am J Cardiol* 7:7-14, 1961.
5. Rubin E, Camara J, Grayzel DM, Zak FG: Radiation-induced cardiac fibrosis. *Am J Med* 34:71-75, 1963.
6. Vaeth JM, Feigenbaum LZ, Merrill MD: Effects of intensive radiation on the human heart. *Radiology* 76:755-762, 1961.
7. Dollinger MR, Lavine DM, Foye LV Jr: Myocardial infarction due to post-irradiation fibrosis of the coronary arteries. Case of successfully treated Hodgkin's disease with lower esophageal involvement. *J A M A* 195:316-319, 1966.
8. Prentice RTW: Myocardial infarction following radiation. *Lancet* 2:388, 1965.
9. Schweizer E: Specific roentgen injury of the heart muscle. International Abstracts of Roentgen and Radium Literature. *Am J Roentgenol Radium Ther* 14:289, 1925.
10. Burch GE, Sohal RS, Sun SC, et al: Effects of radiation on the human heart. An electron microscopic study. *Arch Intern Med* 121:230-234, 1968.
11. Fajardo LF, Stewart JR: Pathogenesis of radiation-induced myocardial fibrosis. *Lab Invest* 29:244-257, 1973.
12. Maximow AA: Studies on the changes produced by roentgen rays in inflamed connective tissue. *J Exp Med* 37:319-340, 1923.



FIG. 6. Chest film postpericardiectomy.

13. Morton DL, Glancy DL, Joseph WL, Adkins PC: Management of patients with radiation-induced pericarditis with effusion: a note on the development of aortic regurgitation in two of them. *Chest* 64:291-297, 1973.
14. Marks RD Jr, Agarwal SK, Constable WC: Radiation induced pericarditis in Hodgkin's disease. *Acta Radiol (Ther)* 12:305-312, 1973.
15. Masland DS, Rotz CT Jr, Harris JH Jr: Postirradiation pericarditis with chronic pericardial effusion. *Ann Intern Med* 69:97-102, 1968.
16. Kagan AR, Morton DL, Haferman MD, Johnson RE: Evaluation and management of radiation-induced pericardial effusion. *Radiology* 92:632-634, 1969.
17. Pierce RH, Hafermann MD, Kagan AR: Changes in the transverse cardiac diameter following mediastinal irradiation for Hodgkin's disease. *Radiology* 93:619-624, 1969.
18. Steinberg I: Effusive-constrictive radiation pericarditis. Two cases illustrating value of angiocardigraphy in diagnosis. *Am J Cardiol* 19:434-439, 1967.
19. Macleod CA, Schwartz H, Linton DB: Constrictive pericarditis following irradiation therapy. *J A M A* 207:2281-2282, 1969.
20. Stewart JR, Fajardo LF: Radiation-induced heart disease. Clinical and experimental aspects. *Radiol Clin North Am* 9:511-531, 1971.
21. Keelan MH Jr, Rudders RA: Successful treatment of radiation pericarditis with corticosteroids. *Arch Intern Med* 134:145-147, 1974.
22. Fajardo LF, Stewart JR, Cohn KE: Morphology of radiation-induced heart disease. *Arch Path* 86:512-519, 1968.



EDITORIAL



Put 'Em In a Yankee Uniform And

THE power, the awesome power awarded me by my colleagues to write this editorial. Plus, I have a captive audience statewide that has to suffer through these words of fact(?) and wit(?) in hopes of finding the elusive pearl. One point does disturb me however. Who am I, who writes so little, to judge and to correct another man's work when he is probably a far more prolific writer and author than I?

In days gone by (the last World Series, notwithstanding) when the New York Yankees baseball dreadnought was steamrolling over all opponents in both leagues, there was a saying that implied that a good ballplayer became a great ballplayer simply by putting on the pinstripe uniform of the Yankee team.

Oh, how I hope this analogy will apply to me as I pick up the pen to write as an editor of this fine journal. My teammates—the editors—past and present have all had success with the written word that I have to envy. The likes of the Humes,

the Overstreets, the Llewellyns, the Schrodts, doctors all who use words with the strength of a stonemason, yet the nimbleness and dexterity of a Nadia Comaneci. May their “pen-stripe” become my pinstripe.

Yet, isn't that what medicine is or becomes? Don't we begin as ordinary men who have had the good fortune to get into and then out of medical school? Then the degree in medicine becomes our “pinstripe uniform” and we begin to exhibit the compassion, the warmth, and the altruism that is the hallmark of our profession.

As we embark on our nation's third century, isn't this a brilliant time for us to reaffirm those ideals that have made American medicine what it is? Can we not even raise our threshold for new endeavor in our pursuit of this excellence? How did it read on the front step of the old Phi Chi house? “A threshold high enough to turn deceit aside.” MFM

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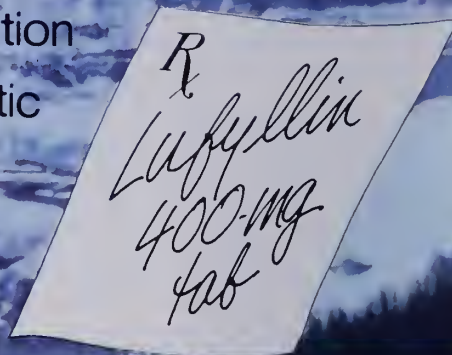
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Great caution should be used in giving dyphylline to patients in congestive heart failure. Such patients have shown markedly prolonged blood level curves which have persisted for long periods following discontinuation of the drug.

Adverse Reactions: Note: Included in this listing which follows are a few adverse reactions which may not have been reported with this specific drug. However, pharmacological similarities among the xanthine drugs require that some of the reactions be considered when dyphylline is administered.

The most consistent adverse reactions are:

1. Gastrointestinal: irritation, nausea, vomiting, and epigastric pain, generally preceded by headache, hematemesis, diarrhea.

2. Central nervous system stimulation: irritability, restlessness, insomnia, reflex hyperexcitability, muscle twitching, clonic and tonic generalized convulsions, agitation.

3. Cardiovascular: palpitation, tachycardia, extrasystoles, flushing, marked hypotension, and circulatory failure.

4. Respiratory: tachypnea, respiratory arrest.

5. Renal: albuminuria, increased excretion of renal tubule and red blood cells.

6. Others: fever, dehydration.

Dosage and Administration: Adults—Usual Dose—15 mg/kg every 6 hours, up to four times a day. The dosage should be individualized by titration to the condition and response of the patient, with therapeutic blood levels considered to be between 10 mcg/ml and 20 mcg/ml. Levels above 20 mcg/ml may produce toxic effects.

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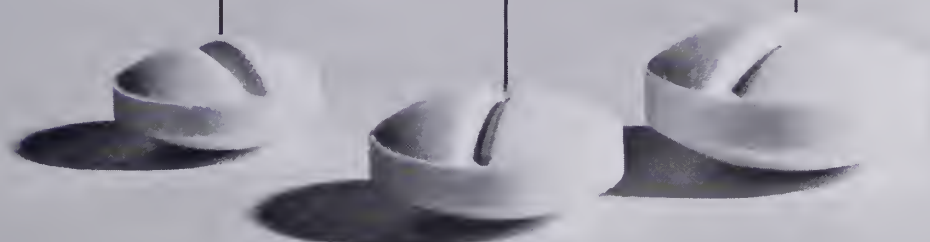
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Final classification of the less than effective indications requires further investigation.

CONTRAINDICATIONS. Administration of Antivert (meclizine HCl) during pregnancy or to women who may become pregnant is contraindicated in view of the teratogenic effect of the drug in rats.

The administration of meclizine to pregnant rats during the 12-15 day of gestation has produced cleft palate in the offspring. Limited studies using doses of over 100 mg./kg./day in rabbits and 10 mg./kg./day in pigs and monkeys did not show cleft palate. Congeners of meclizine have caused cleft palate in species other than the rat.

Meclizine HCl is contraindicated in individuals who have shown a previous hypersensitivity to it.

WARNINGS. Since drowsiness may, on occasion, occur with use of this drug, patients should be warned of this possibility and cautioned against driving a car or operating dangerous machinery.

Usage in Children: Clinical studies establishing safety and effectiveness in children have not been done; therefore, usage is not recommended in the pediatric age group.

Usage in Pregnancy: See "Contraindications."

ADVERSE REACTIONS. Drowsiness, dry mouth and, on rare occasions, blurred vision have been reported.

More detailed professional information available on request.

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Foxy Facts and Fancy

Maurice Fox, age 44, practices Internal Medicine in Palo Alto, California, and, although I am not aware of his qualifications in the socio-economic aspects of medical practice, he did write and there was published a thought-provoking piece in the January 10, 1977, issue of *Newsweek*, entitled "Why People Are Mad At Doctors." In the first paragraph he exclaims that people "are mad as hell at doctors" and in the short second paragraph he lists two major complaints. The first is "socio" in that "doctors don't listen sufficiently to patients' complaints" and the second is clearly economic, "doctors make too much money."

Surely the first complaint is valid, but I know of one Internist who asks each new patient two questions after the history-taking interview. The first question is "have you told me everything about yourself that you should?" and second "what do you think is causing the symptoms of which you complain?" I know these questions never produce silence but bring forth talk aplenty and may result in the doctor listening more-than-sufficiently. Doctor Fox recognizes many patients with no real bodily ills go to doctors and these patients are depressed and fearful. He believes this group misuses the physician's time and that after all of the examinations and tests fail to reveal an organic abnormality they become frustrated and angry. The "worried well" patient must be heard and listening cannot be a misuse of our time. And if the results of examinations and studies are negative, patients are rarely frustrated but relieved and almost never angry but happy. If after listening, examining, testing, and reassuring, a patient remains depressed, fearful, frustrated, or angry, perhaps a Psychiatric evaluation would be appropriate.

Doctors make too much money, the second complaint, can be effectively debated from either side but before the debate is begun we must define "too much." The eight to fifteen years a physician spends in training—years with little or no monetary reward—must be considered with

his 60+ hour work week. And then there is the Great (income) Leveler in Washington—the IRS—and the fiscal mechanism there labeled income transfer wherein the income from those who generate it is transferred to those who do not. Some economists believe we need more income generators because the income recipients are increasing in numbers and their needs are even greater. What if the recipients outnumber the donors? Perhaps making "too much" is really not enough—?

Doctor Fox realistically and responsibly emphasizes the discrepancy between the costs of medical procedures and medical services and the patient's willingness to pay for the former but not the latter. Consider the value of the physician who knows what not to do (a non-procedure), one who listens, and one who spends time thinking (expert thought)—a real service. Maurice Fox advises people (patients) to respect the value of listening, talking, and thinking just as they respect the value of a physician doing something to them. I do not know the circulation figures *Newsweek* boasts of but I hope many (mad at doctors) people will read Doctor Fox's pithy pitch!

Although you may not listen to patient Norman Cousins you can read (rewardingly, I am sure) what he writes in a special article entitled "Anatomy of an Illness," (*N. Engl. J. Med.* 295: 1458-1463, Dec. 23, 1976). Editor Cousins of the *Saturday Review*, who has written interestingly and well on subjects medical, tells of his illness, his researches about the disease, his experiences as a patient, and his self-devised effective treatment. His is a fascinating story—written by a layman, published in a prestigious medical journal with reprints available via *Saturday Review*—that I read with keen interest, real sympathy, and some dubiousity. And as a medically-oriented sequel, do not miss an editorial in the same issue (pages 1478-79) by Editor F. J. Inglefinger, "Listen: The Patient—Once Again," wherein he cleverly analyzes Mr. Cousin's analysis.



SPECIAL ARTICLES



Medical Necessity Project†

C. ROLLINS HANLON, M.D.*

AT every turn, physicians are reminded that health care costs are escalating, with the blame commonly laid on physicians' fees, or more reasonably, on services that physicians control, especially for hospitalized patients. The hospital bill for any illness today is staggering, even though the individual impact is softened by third party payments. Such payments make it less obvious that each superfluous laboratory test, X-ray, or additional day of hospitalization when translated into an aggregate bill for an insurance plan moves up slightly closer to financial disaster.

Although it appears at first blush that the financial disaster lies not at our own door but in the board room of the local Blue Cross plan, the bell really tolls for each of us. We hear the sound when we get word of a rise in Blue Cross premiums or of refusal to allow reasonable increases in physicians' fees. If we dispassionately assess the situation, what courses of action are open to us? For the Blue plans faced by massive depletion of reserves, the alternatives to going out of business are to raise premiums or restrict services. Raising premiums has been carried as far as it can go in some locales; in others, the insurance commissioner has mandated freezing of the premiums. If an insurance plan is to cut benefits it must do so with expert advice from the physicians who order services for the subscribers to the insurance plan.

For the past year the National Association of Blue Shield Plans (NABSP) has been trying to start a cooperative effort to reduce the incidence of procedures which contribute to cost without a parallel contribution to the quality of care. Working with Blue Cross and various professional societies, NABSP is hoping to identify some degree of professional consensus on procedures which

are: 1) established, but of doubtful current value; 2) new, and of unproved value; 3) redundant, in concert with other procedures; 4) unlikely to add more information by repetition.

NABSP is conscious that any hint of dictating the conditions of practice will set up defensive reactions in some members of the medical profession. It also recognizes that physicians are fiercely individualistic, so that a consensus by most of the profession on the value of a given procedure may be rejected in practice by a few rugged souls of a different persuasion. These are not trivial concerns, nor will everyone be satisfied if professional societies set up the conditions for NABSP's scheme and point out that it establishes a pattern for payment, not for practice. The differences between this "medical necessity project" of NABSP and the national guidelines for screening under PSRO are real, although both have an impact on overutilization.

In this issue of the *Bulletin*, the Presidential Address of George Dunlop remarks the same concerns with an exhortation for every physician to cut costs in his own practice setting. Technology moves inexorably forward and costs unfortunately advance with it. We need not be modern Luddites, taking hammers to the CAT scanners springing up like costly weeds in the diagnostic fields around us. But we do need restraint and discrimination in our use of these and other costly modalities of diagnosis.

There are legal implications to the NABSP plan, as well as potential conflicts with union benefit packages, prepared by labor and management with an eye to total coverage rather than discriminating or restricted use of obviously limited resources for medical care. Salvation of the voluntary payment system may reside in plans for such discriminating use, as hammered out by physicians and managers of the various insurance coverages now enjoyed by the majority of American citizens.

†Reprinted from the *Bulletin of the American College of Surgeons*, November, 1976.

*Director, American College of Surgeons

For those who question the need for us to address urgently the problem of inappropriate use, a few statistics may be useful. From mid-year 1974 to the present, the combined reserves of the various Blue plans in the United States have fallen nearly a third from their three billion dollar total. One of the largest private insurance plans, the Federal Employees Program under Blue Cross, Blue Shield auspices, listed nearly half a million dollars in payments for the pre-

sumably abandoned operation of sympathectomy for hypertension, and more than half that amount for uterine suspension procedures! Payments for other outmoded operations contribute further to the waste of our limited resources, as does the wanton use of new diagnostic tests without omitting the tests they are designed to replace. It would not seem difficult to choose between fiscal restraint and bankruptcy with Federal intervention. Time and money are running out.

"Physician, AAMA Offers You Assistant A Way to Grow"[†]

MEMBERSHIP in the American Association of Medical Assistants offers the medical assistant a way to grow in education and professionalism. The objectives of the American Association of Medical Assistants are:

- To inspire its members to give honest, loyal, and efficient service to the profession and the public which they serve.
- To strive at all times to cooperate with the medical profession to improving public relations.
- To provide educational services to increase the knowledge and professionalism of its members and to stimulate a feeling of fellowship and cooperation among its state societies and local chapters.

The AAMA, a non-profit organization, is not a trade union or collective bargaining agency.

Qualified physicians are elected as advisors at local, state and national levels to counsel with officers and committee members throughout the year.

In order to be an effective member of the health care team, a proficient medical assistant must keep up to date and in tune with the changing time. AAMA offers a course in Anatomy and Physiology and a course in Medical Law and Ethics is forthcoming. These may be obtained

from the AAMA Office, One East Wacker Drive, Chicago.

An annual state and national convention features numerous educational programs for the medical assistant. In Kentucky there have also been educational seminars presented on various subjects related to the field of medicine and medical assisting. The latest seminar dealt with "Emergency Medicine." In addition, each chapter holds a monthly meeting at which a guest speaker is featured.

A medical assistant is an efficient humanitarian who lengthens and strengthens the healing arm of the physician . . . when calming a nervous patient . . . listening to the confidences of a troubled teenager . . . or soothing a frightened child.

AAMA is the only medical assistant's organization to have merited official commendation by the American Medical Association. On five different occasions the AMA House of Delegates have passed resolutions commending the objectives of the Association, endorsing its functions and urging each physician to encourage his own assistant to join AAMA and to participate in its educational programs.

If you are interested in AAMA and the benefits it can offer your assistant, please contact Mrs. Claire Brouillette, R.N., President, Kentucky Society AAMA, 980 Creekwood Road, Louisville, Ky. 40223.

[†]Article written by: Sandra Wright, CMA, Chairman, Public Relations Committee, Kentucky Society AAMA.

A PROFESSIONAL SOURCE OF COMFORT FOR INTERNAL AND EXTERNAL ANORECTAL CONDITIONS

Anusol-HC[®] suppositories and cream with hydrocortisone acetate. Rx only pain and burning respond in minutes

ANUSOL-HC[®] SUPPOSITORIES

Rectal Suppositories with Hydrocortisone Acetate

ANUSOL-HC[®] CREAM

Rectal Cream with Hydrocortisone Acetate

CAUTION: Federal law prohibits dispensing without prescription.

Description: Each Anusol-HC Suppository contains Hydrocortisone Acetate, 10.0 mg; Bismuth Subgallate, 2.25%; Bismuth Resorcin Compound, 1.75%; Benzyl Benzoate, 1.2%; Peruvian Balsam, 1.8%; Zinc Oxide, 11.0%; also contains the following inactive ingredients: bismuth subiodide, calcium phosphate, and coloring in a bland hydrogenated vegetable oil base.

Each gram of Anusol-HC Cream contains Hydrocortisone Acetate, 5.0 mg; Bismuth Subgallate, 22.5 mg; Bismuth Resorcin Compound, 17.5 mg; Benzyl Benzoate, 12.0 mg; Peruvian Balsam, 18.0 mg; Zinc Oxide, 110.0 mg; also contains the following inactive ingredients: propylene glycol, bismuth subiodide, propylparaben, methylparaben, polysorbate 60, sorbitan monostearate in a water-miscible base of mineral oil and glyceryl monostearate. Nonstaining.

Indications: Anusol-HC is adjunctive therapy for the symptomatic relief of pain and discomfort in: external and internal hemorrhoids, proctitis, papillitis, cryptitis, anal fissures, incomplete fistulas, and relief of local pain following anorectal surgery.

Anusol-HC is especially indicated when inflammation is present.

Contraindications: History of sensitivity to any component. Topical corticosteroids should not be employed in tuberculous, fungal and most viral lesions of the skin (including herpes, varicella and varicella).

Warning: The safe use of topical steroids during pregnancy has not been fully established.

Therefore, during pregnancy they should not be used unnecessarily on extensive areas, in large amounts or for prolonged periods of time.

Precautions: Symptomatic relief should not delay definitive diagnoses or treatment. When

there is bacterial skin infection, topical corticosteroids should be used only with appropriate concomitant antimicrobial therapy. Prolonged or excessive use of corticosteroids might produce systemic effects.

Dosage and Administration: Anusol-HC Suppositories: Remove foil wrapper and insert suppository into the anus. One suppository in the morning and at bedtime, for 3 to 6 days or until inflammation subsides. Then maintain patient comfort with regular Anusol.

Anusol-HC Cream: Adults—After gentle bathing and drying of the area, remove tube cap and apply to the exterior surface and gently rub in. For internal use, attach the plastic applicator and insert into the anus by applying gentle continuous pressure. Then squeeze the tube to deliver medication. Cream should be applied 3 or 4 times a day for 3 to 6 days until inflammation subsides.

Supplied: Suppositories—boxes of 12 (N 0047-0089-12); in silver foil strips with Anusol-HC printed in black.

Cream—one-ounce tube (N 0047-0090-01) with plastic applicator; detachable label.

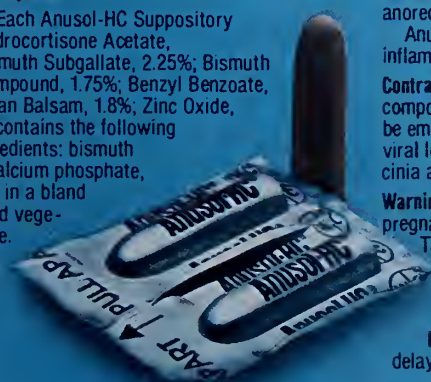
Store Between 59° and 86° F (15° and 30° C)

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AN-GP-71 2/C





RECENT CHANGES

federal register

**Providing
Drug Information
to Physicians**

**Informational
Bulletin #433-76**

**National
Health
Insurance**

special report
**Malpractice
insurance:**

**drug
bulletin**

**Health care doesn't
need more red tape**

**Drug firms challenge
'MAC' rules**

**Drug
Substitution**

**The Congress: Determinator
of Health Progress**
RESEARCH

Mailgram

THERE ARE A LOT OF PEOPLE GETTING BETWEEN YOU AND YOUR PATIENT.

Medicine today is in the spotlight, subjected to all kinds of scrutiny. Your control over patient therapy is being monitored, judged and occasionally abrogated, sometimes by unknown third parties.

The worry is that in the wake of this focus, the relationship between you and your patient will be weakened, without offsetting benefits. Consider three examples:

Drug substitution In most states, pharmacy laws, regulations or professional custom stipulate that your on-generic prescriptions be filled with the precise products you prescribe. But in the last five years, a dozen or more State laws have been changed, permitting the pharmacist in most cases to select a product of the same generic drug to fill any prescription.

Ironically, this dilution of physician control has taken place against a background of growing evidence that purportedly equivalent drug products may be inequivalent, since neither present drug standards nor their enforcement are optimal. In fact, the FDA itself says it has not enforced the same standards for hundreds of "follow-on" products that it had applied to the original FDA approvals. Thus physician control over patient therapy is being eroded with a risk that patients may be exposed to drugs of uncertain quality.

The major advertised claim for substitution is reduced prescription prices for consumers. Yet no documentation of any significant savings has been produced.

MAC Maximum Allowable Cost, MAC for short, is Federal regulation designed to cut the Government's drug bill by setting price ceilings for drugs dispensed to Medicare and Medicaid patients. Unless the prescriber certifies on the prescription that a particular product is medically necessary, the Government intends to pay only the cost of the lowest-priced, purportedly-equivalent,

generally-available product. The effect of the program may be that elderly and indigent patients will be restricted to products which someone in Washington believes are priced right. Practicing doctors will have little to say about administration of the program, since Government will have absolute authority to make its choices stick.

The drug lag The future of drug and device research depends upon a scientific and regulatory environment that encourages therapeutic innovations. The American pharmaceutical industry annually is spending more than \$1 billion of its own funds and evaluating more than 1,200 investigational compounds in clinical research. Disease targets include cancer, atherosclerosis, viruses and central nervous system disorders, among others. But there is a major barrier to the flow of new drugs to your patients: The cost of the research is more than ten times what it was, per product, in 1962; and whereas governmental clearance of new drug applications took six months then, it commonly consumes two years now.

The FDA needs adequate time, of course, to consider data. But it is equally clear that the present approval process contributes to needless delay of needed therapy. That's why the increased efficiency of the drug approval process is vital to all our futures.

If these issues concern you, we suggest that you make your voice heard—among your colleagues and your representatives in State legislatures and in Washington.

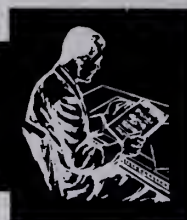
It could make a difference in your practice tomorrow.



Pharmaceutical Manufacturers Association
1155 Fifteenth Street, N.W., Washington, D.C. 20005



MATERNAL MORTALITY



From the Files of the KMA Maternal Mortality Study Committee

—Edited by John W. Greene, Jr., M.D.

6-75. This is a 36-year-old, married, white, Gravida 1, Para 0, female whose LNMP was August 10, 1974. She was under the care of a private physician. She had an unengaged presentation and had a contracted pelvis on x-ray, so delivery by Cesarean section had been planned.

She was admitted to a 92-bed hospital (that delivers 30-35 infants a month) at 5 a.m., May 10, 1975, with a history of having contractions since 11 p.m., May 9, 1975. Her membranes had ruptured spontaneously. The time of rupture wasn't stated. Contractions were occurring every five minutes, described as of short duration; she was uncomfortable. Examination on admission revealed weight of 140 lbs., 5 feet, temperature 99, chest clear, and BP 120/70. The FHT was good and regular. The pelvic examination revealed no dilation or effacement of the cervix and a contracted pelvic outlet.

She was prepared for operation and under general anesthesia a 7 lb 2 oz male was delivered by section and an elective appendectomy performed.

The first five days of the postoperative period were uneventful. She was ambulatory, tolerating her diet, and caring for her baby. She had a low-grade temperature of 100 on May 14. On the morning of the 16th, she complained of chest pain. Examination at 10 a.m. — BP 118/70, pulse extremely rapid, 150 chest breath sounds clear, abdomen soft. EKG revealed abnormal tracing showing ventricular tachycardia of 190. At noon she received 4 mg of Cedilanid and 1 mg Neo-Synephrine; carotid pressure was tried with a rate of 150. At 12:45 p.m. there was no change and an Aramine drip was started. At 3:30 p.m. her rectal temperature was 101, repeat EKG, sinus tachycardia rate was 150. A friction rub was present in right lower chest. Impression was pulmonary embolus. She received Heparin, 375 mg Solu-Medrol, 2 ml dose Cedilanid. Her urine output was 25 cc in one hour. Blood pressure was 60-70. She received 12.5 gm of Mannitol IV rapidly and 12.5 gm added to IV. A nasogastric tube was inserted with 1000 cc greenish fluid removed. The patient stated breathing was easier.

She was catheterized at 12:50 p.m. and 125 cc urine

was obtained. She had no more output until 3 p.m. when 25 cc was measured. She appeared to be sleepy but was aroused when touched. She had another 30 cc urine output at 4 p.m. The IV fluids were running well. Her respirations were labored at 4:15 and she was cyanotic. Oxygen was started and 2 cc Aramine was given IV rapidly. She ceased to breathe and no pulse could be obtained. At 4:35 p.m., resuscitation attempts were unsuccessful.

An autopsy was requested but refused. The cause of death was term pregnancy with cephalopelvic disproportion, pulmonary embolism.

Comment

The Committee on Maternal Mortality classified this as an obstetrical, (questionable), preventable death, since complete information was not given to the Committee. One criticism the Committee did have was the fact that a Cesarean section was undertaken when no dilation or effacement of the cervix was allowed. It is appreciated that a woman 36 years of age is classified by some as an elderly primigravida, however, it is well known that unless absolute pelvic contraction is diagnosed on physical examination, that a trial labor is indicated. The Committee was not presented with adequate information as to her pelvic size. So therefore, it would seem that a trial labor would have been indicated, and possibly a Cesarean section avoided.

The question was raised as to whether therapy was sufficiently vigorous in treating what appeared to be a pelvic phlebitis. Perhaps larger doses of anticoagulant therapy and antibiotics with consideration of vena cava and ovarian vein plication might have been effective. The question was raised as to whether routine appendectomy is an approved procedure during pregnancy. It is felt by the majority of the members of the Committee that such an operation is justified. Again, as is so often the situation with the Maternal Mortality Committee, we are not presented with autopsy results so that exact cause of death cannot be ascertained.

Temporarily

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- Codeine Phosphate10 mg
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PATIENT BENEFITS

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not to exceed 6 doses in 24 hours



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ASSOCIATIONAL NEWS



Shirley Roessler, Don Chasteen Named to KMA Executive Staff

Two KMA Executive Staff members were announced recently by Executive Vice President Robert G. Cox with the naming of Mrs. Shirley Roessler as Administrative Assistant and Mr. Don Chasteen as Director of Public Affairs.



Mrs. Roessler



Mr. Chasteen

Mrs. Roessler, a lifetime Louisville resident, has been employed by the Association for over seven years and was named to her new position effective January 1. Her duties will include responsibility for the Rural Kentucky Medical Scholarship Fund, KMA Placement Service, Judicial Council, and general administrative matters.

Mr. Chasteen is also a native Kentuckian. Born in Lexington, he has recently lived in Somerset, Bowling Green, and Lexington, while employed with Kentucky Blue Cross-Blue Shield. A Past President of the Kentucky Jaycees and a University of Kentucky graduate, his duties will center on state legislative matters, lobbying, representing the Association with allied groups and the news media, as well as staffing a number of KMA committees.

Plans Are Being Finalized For Two KMA Seminars

The **Joint Practice Seminar**, sponsored by the KMA-KNA Joint Practice Committee, will be held March 5 at the Ramada Inn-Bluegrass Convention Center, Louisville. The day-long Seminar, entitled "Joint Practice: Now and In the Future," will feature guest speakers from the National Joint Practice Commission along with various prominent local speakers in the field of Joint Practice.

A **residents' workshop** entitled, "Establishing Yourself in Medical Practice," will be held on April 26-27 at the Ramada Inn-Bluegrass Convention Center, Louisville, also. The program consists of two days of intensified training for senior residents who are preparing to enter into private practice and will deal with such subjects as

personnel problems, patient flow techniques, physical aspects of the medical office, clinical and financial paper work, practice location, and legal problems. The workshop, which has a limited enrollment, is expected to have a full registration.

For additional information on both seminars, contact the KMA Headquarters Office.

Sixth Sports Seminar Planned March 17-18 in Louisville

The Sixth Annual Medical Aspects of Sports Seminar, sponsored by the KMA School Health, Physical Education and Medical Aspects of Sports Committee and the Kentucky Bureau for Health Services, Nutritional Unit, is to be held March 17-18 in conjunction with the Kentucky State Basketball Tournament.

The Seminar, which will consist of two morning sessions, will be held at the Executive Inn in Louisville. Nathaniel Smith, M.D., Seattle, Washington, will be the featured speaker for the program. Doctor Smith is noted for his work in the nutritional aspects of sports medicine.

The program, which is designed for physicians, school administrators, teachers, coaches, trainers, and student trainers, will deal with weight control in wrestling, preparation for competition, the official's role in preventing athletic injuries, and women's role in contact sports.

All inquiries in regard to the Sports Seminar should be directed to the KMA Headquarters Office.

Lexington Clinic Conference To Deal With Allergies

The Lexington Clinic will sponsor its 22nd Annual Clinical Conference on Thursday, April 7. This year's conference will deal with "Newer Approaches to Allergic Disorders."

Participants in the session, which will begin with registration at 8:30 a.m., EST, include members of the Lexington Clinic staff and several out-of-state guest speakers. John Gerrard, D.M., F.R.C.P., Professor of Pediatrics at the University of Saskatchewan, will speak on "Food Allergy in Children." Other guest speakers are Joseph Ghory, M.D., Director of Pediatric Allergy, Convalescent Hospital for Children, University of Cincinnati Medical Center, and Phil Lieberman, M.D., Chief, Section on Allergy and Immunology, University of Tennessee Medical Center, Memphis.

The April 7 conference is acceptable for 5 1/2 hours of prescribed credit by the American Academy of Family Physicians. Application has also been made for Category I credit for those attending the symposium.

Digest of Proceedings, Board of Trustees December 15-16, 1976

The KMA Board of Trustees held its second meeting of the Associational year on Wednesday, December 15, and Thursday, December 16.

President Paul J. Parks presented a detailed report concerning his activities since assuming the presidency of KMA, reporting on the unified membership referendum, noting that the members had voted not to have mandatory AMA membership. He also presented in full his activities relating to continuing medical education to include both his appearances before the State Board of Medical Licensure and his meeting with the KMA Continuing Medical Education Committee.

Secretary-Treasurer S. Randolph Scheen reported on the membership and finances of the Association, and the Executive Vice President discussed current activities of KMA and staff involvement.

Doctor David Stevens discussed the actions of the AMA House of Delegates at the Clinical Convention in Philadelphia in December, and then made a presentation on behalf of the Board to the retiring Senior Delegate, Thomas Giannini, M.D., and Alternate Delegate, Charles G. Bryant, M.D., both from Louisville. Doctor Stevens further discussed preliminary plans for the reelection campaign of Hoyt D. Gardner, M.D., to the AMA Board of Trustees, noting that his term is up in June of 1977.

Other reports presented included a thorough presentation by Doctor Neville Caudill, President of the Kentucky Peer Review Organization, and Mr. Don Giffen, President of Blue Cross-Blue Shield, who discussed the merger of Blue Cross and Blue Shield, and responded to questions of the Board members.

Chairman James Holloway presented items acted upon by the Executive Committee to include matters relating to KMA's Health Care Costs Council; a newly formed CT Scanner Committee; the implementation of House of Delegates actions; a full report on liability insurance to include KMA testimony, progress in that test suit, and progress in the formation of a KMA Insurance Company. He further presented nominations to the Board for action regarding Governor appointments from KMA on the Advisory Council for Medical Assistance and the Kentucky Drug Formulary Council.

A thorough discussion was held on a report compiled last year by the Maternal and Child Care Committee. Suggestions were presented to Doctor William Keller who serves on the committee as well as being a member of the KMA Board. The Board recommended additional committee activity and a further report at a later date.

Considerable time was spent discussing Medicare reimbursement and the new policy established by the House of Delegates in September, 1976. Officials of Metropolitan, Medicare's Part B Carrier in Kentucky were in attendance for the purpose of making a presentation and responded to many questions presented by members of the Board. After hearing new and additional information that was made available to them in September, the Board felt it appropriate for the House of Delegates to have a special session for the purpose

of reconsidering the policy concerning Medicare reimbursement on a statewide single classification basis. The Board noted that the delay in a final statement by KMA would in no way delay Medicare's implementation, and thus they felt it to be a more responsible action if the House had an opportunity to meet and confirm the action or change it as might be indicated prior to making this change in the reimbursement method. The Board then voted to ask the President to call such a meeting of the House of Delegates on February 10, 1977.

Other informational reports were presented concerning HSAs, the KMA Annual Meeting, the Journal of KMA, the Continuing Medical Education Conference of KMA, and the appointment policy of county health board members.

The Auxiliary President, Mrs. Parnell Rollings, appeared before the Board seeking approval for the Auxiliary to have its Convention in the Spring beginning in 1978, rather than at the same time as the KMA Annual Meeting. The Board approved such plans.

The next meeting of the Board was scheduled for February 10, 1977, preceding the special-called meeting of the House of Delegates.

KET Begins Medical Series, Next Program, Feb. 16

A new medical information series is now being broadcast by the Kentucky Educational Television (KET). The series, entitled "MD," is hosted by Daniel W. Foster, M.D., Professor of Internal Medicine at the University of Texas Health Center at Dallas.

Begun on an experimental basis, "MD's" goals are to give the public accurate health information, to stress the importance of medical research, and to inform the public of the medical resources available.

The 30-minute programs feature a talk-show format interspersed with films of doctors and patients and medical illustrations. Upcoming programs include transplant surgery (February 16), rheumatoid arthritis (February 23), and hepatitis (March 2). KET is hopeful physicians will relay their opinions of the programs to the station.



Did you know . . .

Recently KMA voiced strong opposition to proposed federal regulation changes in **disclosure of information** with regards to Social Security activities. The release of information, KMA argued, is a right reserved for the patient, who in all cases except fraud should be contacted in order to authorize release of this information. Information on fees paid to individual physicians or incorporated physician groups should not be released except when fraud and abuse are suspected and at that time in a discreet manner so as to protect the physician's rights.

KMA provided views on **Medicare reimbursement** of non-physician health personnel to U.S. Representative Tim Lee Carter, M.D.

KMA had physician and staff representation at an AMA Regional Meeting on State Health Legislation in Orlando, Florida. Emphasis of the meeting was on the art of lobbying, malpractice, medical discipline, and CME.

KMA is active in numerous **state-appointed councils in the government**, with physicians serving and working on the following councils, commissions, boards, and committees:

- Comprehensive Health Planning Council
- Kentucky Drug Formulary Council
- Kentucky Health Facilities and Health Services Certificate of Need and Licensure Board
- Hemophilia Advisory Committee
- Advisory Council for Medical Assistance
- Medical Laboratory Advisory Council
- Kentucky State Board of Medical Licensure
- Mental Health Advisory Council
- Kentucky Board of Licensure for Nursing Home Administrators
- Advisory Council to the Board of Nursing Education and Nurse Registration
- General Radiation Advisory Committee
- Radiation Operators Advisory Committee
- Committees of the Council on Public Higher Education
 - Ad Hoc Group on Podiatry
 - Data Development Task Force
 - Advisory Committee concerning the Education of Health Manpower
- Committee of the Ohio Valley Regional Medical Program (Physicians Advisory)
- Council for Health Services



Committee Activity

McDowell House Board of Managers Meeting December 15

The McDowell House Board reviewed the proposed budget for 1977-78 Fiscal Year at the December meeting. Budget projections show an expected increase in admissions to the House, book sales, and donations from various associations and individuals which will be helpful in maintaining the House and property.

Extensive exterior renovations, including replacement of fences, painting, landscaping and structural support work, will soon begin on the House. These improvements were made possible through funds received from the Kentucky Heritage Commission. The KMA Auxiliary McDowell House Refurnishing Fund has been extensively used to purchase antiques and various other items for the House.



Headquarters Activity

KMA had physicians and staff members in attendance at the following activities and events:

DECEMBER

- 14-15 American Association of Medical Society Executives Advisory Council, Chicago
- 15 State Comprehensive Health Planning Council, Louisville
- 15 KMA Executive Committee, Louisville
- 15-16 KMA Board of Trustees, Louisville

JANUARY

- 3-8 Joint Commission on Medical Conventions, Atlanta
- 6-8 State Health Legislation Regional Meeting, Orlando, Florida
- 12 KPRO Annual Membership Meeting, Louisville
- 17 Journal Editors Meeting, Louisville
- 20 State Medical Journal Conference, Chicago
- 20-23 AMA National Leadership Conference, Chicago

FEBRUARY

- 9 Cancer Committee, Louisville
- 10 KMA Board of Trustees, Louisville
Special Session, KMA House of Delegates, Louisville
- 15 Joint Practice Committee, Louisville
- 16 Judicial Council, Louisville
- 17 State Board of Medical Licensure, Louisville
- 18-19 Medical Education Conference, Elizabethtown



Members in the news

NEW MEMBERS

BOYD

Ralph I. Touma, M.D., Ashland

BOYLE

Jack S. Cody, M.D.

CAMPBELL-KENTON

Joseph J. Bravo, M.D., Ft. Mitchell
John W. Brogan, M.D., Erlanger
Donal S. Cullen, M.D., Erlanger
Daniel E. Earley, M.D., Covington
Donal D. Gaynor, M.D., Ft. Mitchell
Dennis R. Molony, M.D., Ft. Thomas

CHRISTIAN

Antero J. Avenido, M.D., Hopkinsville

FAYETTE

Hamid H. Sheikh, M.D., Lexington

FLOYD

Larry Leslie, M.D., Prestonsburg

FRANKLIN

John A. Gergen, M.D., Frankfort
Wille H. Rush, Jr., M.D., Frankfort

HARDIN

Paul S. Armstrong, M.D., Elizabethtown
Vivian Bland, M.D., Elizabethtown

HARLAN

Harry Bauer, M.D., Harlan
M. F. Saydjari, M.D., Benham

HENDERSON

Randall S. Brown, M.D., Henderson
Donald Goodwin, M.D., Henderson
Don Pruitt, M.D., Henderson
Jason Samuel, M.D., Henderson
Robert W. Youngblood, M.D., Henderson

HOPKINS

James Middleton, Jr., M.D., Madisonville

JEFFERSON

Luis Contreras, M.D., Louisville

LARUE

Jerry R. Smith, M.D., Hodgenville

MCCRACKEN

Yoshinori Tokunaga, M.D., Paducah

PIKE

Terry L. Wright, M.D., Elkhorn City

HONORS

John T. Queenan, M.D., Louisville, was recently elected to a two-year term as President of the newly formed National Perinatal Association. Doctor Queenan is the Chairman of the Department of Obstetrics and Gynecology at the University of Louisville School of Medicine.

W. Grady Stumbo, M.D., Hindman, was selected by the United States Jaycees as one of America's Ten Outstanding Young Men for 1977. Doctor Stumbo, President of the East Kentucky Health Services Center, accepted the award on January 15 in Las Vegas.

David A. Hull, M.D., Lexington, Immediate Past President of KMA, was recently appointed by Governor Julian Carroll to a four-year term on the University of Kentucky Board of Trustees.

In Memoriam

FRANK W. OLIPHANT, M.D.
Cadiz
1913-1976

Frank W. Oliphant, M.D., died on November 7 at the age of 63. A 1934 graduate of the Indiana University School of Medicine, Doctor Oliphant, a family practitioner, belonged to the Pennyryle Multi-County Society, as well as the Kentucky and American medical associations.

BRIEF SUMMARY OF PRESCRIBING INFORMATION

ANTIMINTH® (pyrantel pamoate) **ORAL SUSPENSION**

Actions. Antiminth (pyrantel pamoate) has demonstrated anthelmintic activity against *Enterobius vermicularis* (pinworm) and *Ascaris lumbricoides* (roundworm). The anthelmintic action is probably due to the neuromuscular blocking property of the drug.

Antiminth is partially absorbed after an oral dose. Plasma levels of unchanged drug are low. Peak levels (0.05-0.13 µg/ml) are reached in 1-3 hours. Quantities greater than 50% of administered drug are excreted in feces as the unchanged form, whereas only 7% or less of the dose is found in urine as the unchanged form of the drug and its metabolites.

Indications. For the treatment of ascariasis (roundworm infection) and enterobiasis (pinworm infection).

Warnings. *Usage in Pregnancy:* Reproduction studies have been performed in animals and there was no evidence of propensity for harm to the fetus. The relevance to the human is not known.

There is no experience in pregnant women who have received this drug.

The drug has not been extensively studied in children under two years; therefore, in the treatment of children under the age of two years, the relative benefit/risk should be considered.

Precautions. Minor transient elevations of SGOT have occurred in a small percentage of patients. Therefore, this drug should be used with caution in patients with preexisting liver dysfunction.

Adverse Reactions. The most frequently encountered adverse reactions are related to the gastrointestinal system.

Gastrointestinal and hepatic reactions: anorexia, nausea, vomiting, gastralgia, abdominal cramps, diarrhea and tenesmus, transient elevation of SGOT.

CNS reactions: headache, dizziness, drowsiness, and insomnia. Skin reactions: rashes.

Dosage and Administration. *Children and Adults:* Antiminth Oral Suspension (50 mg of pyrantel base/ml) should be administered in a single dose of 11 mg of pyrantel base per kg of body weight (or 5 mg/lb.); maximum total dose 1 gram. This corresponds to a simplified dosage regimen of 1 ml of Antiminth per 10 lb. of body weight. (One teaspoonful=5 ml.)

Antiminth (pyrantel pamoate) Oral Suspension may be administered without regard to ingestion of food or time of day, and purging is not necessary prior to, during, or after therapy. It may be taken with milk or fruit juices.

How Supplied. Antiminth Oral Suspension is available as a pleasant tasting caramel-flavored suspension which contains the equivalent of 50 mg pyrantel base per ml, supplied in 60 ml bottles and Unitcups™ of 5 ml in packages of 12.

ROERIG 

A division of Pfizer Pharmaceuticals
New York, New York 10017



eliminates Pinworms and Roundworms with a single dose

- **Single dose effectiveness against both pinworms and roundworms** —

The only single-dose anthelmintic effective against pinworms *and* roundworms.

- **Nonstaining** — to oral mucosa, stomach contents, stools, clothing or linen.

- **Well tolerated** — the most frequently encountered adverse reactions are related to the gastrointestinal tract.

- **Economical** — a single prescription will treat the whole family.

- **Highly acceptable** — pleasant-tasting caramel flavor.

- **Convenient** — just 1 tsp. for every 50 lbs. of body weight. May be taken without regard to meals or time of day.

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Please see prescribing information on facing page. NSN 6505-00-148-6967

Antiminth[®] ORAL
SUSPENSION
(pyrantel pamoate) equivalent to 50mg pyrantel/ml

Famous Fighters



NEOSPORIN® Ointment (polymyxin B-bacitracin-neomycin) is a famous fighter, too.

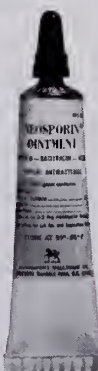
Provides overlapping, broad-spectrum antibacterial action to help combat infection caused by common susceptible pathogens (including staph and strep).

Each gram contains: Aerosporin® brand Polymyxin B Sulfate 5,000 units; zinc bacitracin 400 units; neomycin sulfate 5 mg (equivalent to 3.5 mg neomycin base); special white petrolatum qs in tubes of 1 oz and 1/2 oz and 1/32 oz (approx.) foil packets.

INDICATIONS: Therapeutically (as an adjunct to systemic therapy when indicated) for topical infections, primary or secondary, due to susceptible organisms, as in: • infected burns, skin grafts, surgical incisions, otitis externa • primary pyodermas (impetigo, ecthyma, sycosis vulgaris, paronychia) • secondarily infected dermatoses (eczema, herpes, and seborrheic dermatitis) • traumatic lesions, inflamed or suppurating as a result of bacterial infection.

Prophylactically, the ointment may be used to prevent bacterial contamination in burns, skin grafts, incisions, and other clean lesions. For abrasions, minor cuts and wounds accidentally incurred, its use may prevent the development of infection and permit wound healing. **CONTRAINDICATIONS:** Not for use in the eyes or external ear canal if the eardrum is perforated. This product is contraindicated in those individuals who have shown hypersensitivity to any of the components.

WARNING: Because of the potential hazard of nephrotoxicity and ototoxicity due to



neomycin, care should be exercised when using this product in treating extensive burns, trophic ulceration and other extensive conditions where absorption of neomycin is possible. In burns where more than 20 percent of the body surface is affected, especially if the patient has impaired renal function or is receiving other aminoglycoside antibiotics concurrently, not more than one application a day is recommended. **PRECAUTIONS:** As with other antibacterial preparations, prolonged use may result in overgrowth of nonsusceptible organisms, including fungi. Appropriate measures should be taken if this occurs. **ADVERSE REACTIONS:** Neomycin is a not uncommon cutaneous sensitizer. Articles in the current literature indicate an increase in the prevalence of persons allergic to neomycin. Ototoxicity and nephrotoxicity have been reported (see Warning section).

Complete literature available on request from Professional Services Dept. PML.



Burroughs Wellcome Co.
Research Triangle Park
North Carolina 27709



She's a graduate of Columbia with a Masters in literature.

She's a vice president of a publishing company.

She's watched television programs and read dozens of pamphlets and articles about early cancer detection.

She has relatives and close, personal friends who have had mastectomies.

She's about as aware of the need for breast self-examination as any intelligent woman could be.

Yet she does not get regular checkups nor does she even examine her own breasts.

Why? Because her doctor never told her to.

But 92% of the women who receive personal instruction from their doctors *do* regularly practice BSE.*

You don't have to be told how important early detection is. But maybe you need this reminder that a few personal words from you can often mean more than the millions of words that go into publicity and television programs.

*Based on a Gallup study conducted for the American Cancer Society.



Photo: Ray Solowinski

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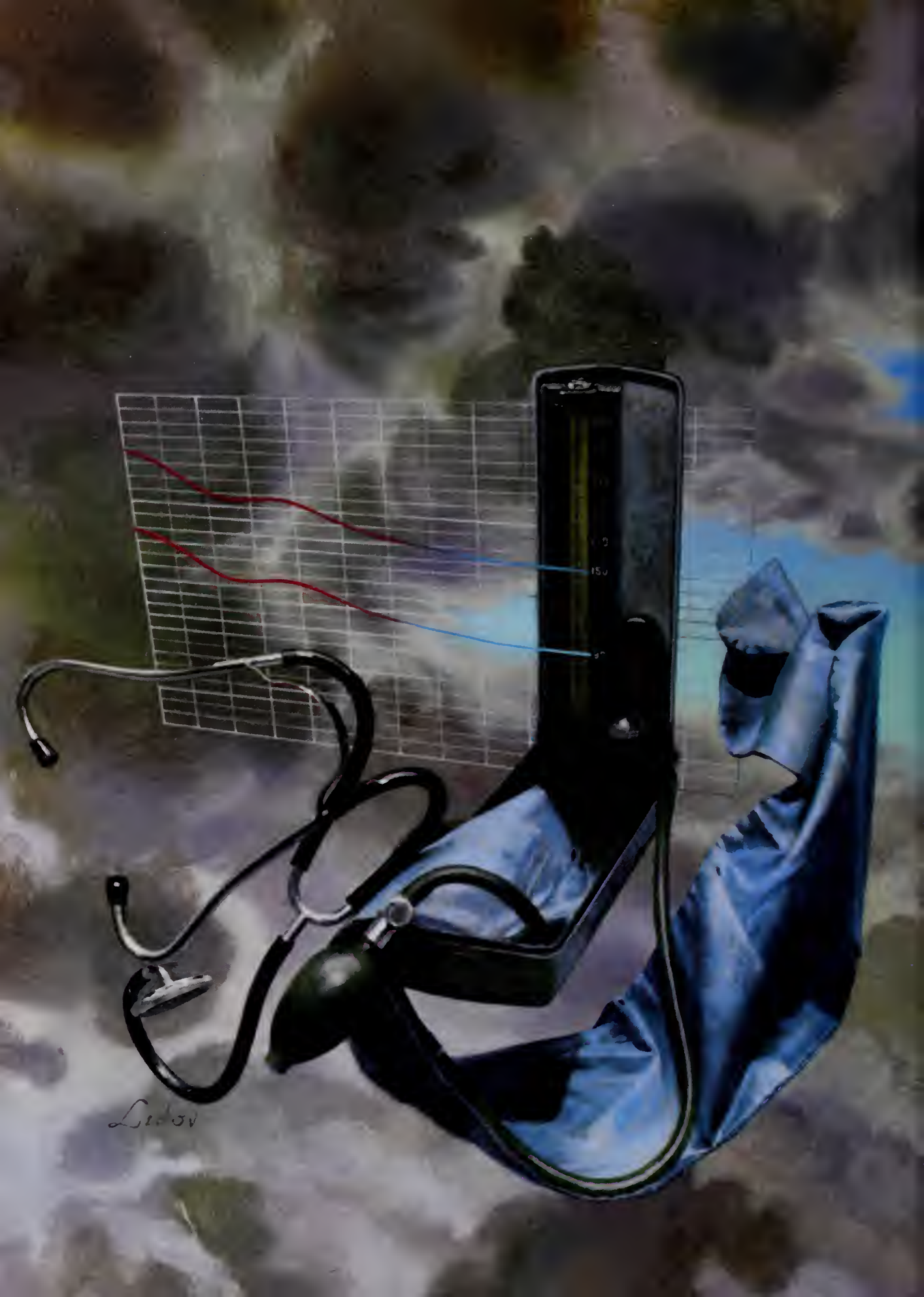
Hearing losses are among the most consistently neglected health problems. Many people with them won't even admit it to themselves, let alone others. A little encouragement may start them thinking about themselves more realistically.

That's why we're offering you the poster shown here. You can hang it on the wall or stand it on a small table. It comes with booklets called "As precious as sight" that give your patients some basic facts about auditory testing and hearing losses and how easy they are to correct in many cases.

Write to us for your free poster and booklets. They just might help you to help some patients who aren't hearing as well as they used to. Even those who ordinarily wouldn't hear of it.

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WHEN A HEARING
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L. 13V

When choosing a diuretic for day-in-day-out hypertension control with comfortable compliance...

The agent you choose in mild to moderate essential hypertension should offer (1) long-term effectiveness, (2) patient comfort and compliance.

Zaroxolyn offers both.

In one long-term study¹ Zaroxolyn brought moderately elevated (average 161/109 mm Hg) blood pressure down to the range of normotension—and held it there for a year or more.

The investigator noted, "Patient cooperation was surprisingly good for a study of such duration [2½ years]. The once-daily dosage schedule with

metolazone [Zaroxolyn] no doubt contributed to patient compliance."

Overall compliance with Zaroxolyn is good—very good. An analysis of controlled clinical studies involving 188 Zaroxolyn patients showed that only eight discontinued therapy because of side effects. That's a discontinuation rate of only 4.3%, and broader clinical experience appears to substantiate this low rate?

Zaroxolyn. For long-term control and comfortable compliance in mild to moderate hypertension.

Recommended initial dosage in mild to moderate essential hypertension—2½ to 5 mg once daily

Zaroxolyn[®]
(metolazone, Pennwalt)

2½-mg, 5-mg and 10-mg tablets

once-daily antihypertensive diuretic

Before prescribing, see complete prescribing information in the package insert, or in PDR, or available from your Pennwalt representative. The following is a brief summary. **Indications:** Zaroxolyn (metolazone) is an antihypertensive diuretic indicated for the management of mild to moderate essential hypertension as sole therapeutic agent and in the more severe forms of hypertension in conjunction with other antihypertensive agents. Also, edema associated with heart failure and renal disease. **Contraindications:** Anuria, hepatic coma or precoma; allergy or sensitivity to Zaroxolyn. Or, as a routine in otherwise healthy pregnant women. **Warnings:** In theory cross-allergy may occur in patients allergic to sulfonamide-derived drugs, thiazides or quinethazone. Hypokalemia may occur, and is a particular hazard in digitalized patients; dangerous or fatal arrhythmias may occur. Azotemia and hyperuricemia may be noted or precipitated. Considerable potentiation may occur when given concurrently with furosemide. When used concurrently with other antihypertensives, the dosage of the other agents should be reduced. Use with potassium-sparing diuretics may cause potassium retention and hyperkalemia. Administration to women of childbearing

age requires that potential benefits be weighed against possible hazards to the fetus. Zaroxolyn appears in the breast milk. Not for pediatric use. **Precautions:** Perform periodic examination of serum electrolytes, BUN, uric acid, and glucose. Observe patients for signs of fluid or electrolyte imbalance. These determinations are particularly important when there is excessive vomiting or diarrhea, or when parenteral fluids are administered. Patients treated with diuretics or corticosteroids are susceptible to potassium depletion. Caution should be observed when administering to patients with gout or hyperuricemia or those with severely impaired renal function. Hyperglycemia and glycosuria may occur in latent diabetes. Chloride deficit and hypochloremic alkalosis may occur. Orthostatic hypotension may occur. Dilutional hyponatremia may occur in edematous patients in hot weather. **Adverse Reactions:** Constipation, nausea, vomiting, anorexia, diarrhea, bloating, epigastric distress, intrahepatic cholestatic jaundice, hepatitis, syncope, dizziness, drowsiness, vertigo, headache, orthostatic hypotension, excessive volume depletion, hemoconcentration, venous thrombosis, palpitation, chest pain, leukopenia, urticaria, other skin rashes, dryness of mouth,

hypokalemia, hyponatremia, hypochloremia, hypochloremic alkalosis, hyperuricemia, hyperglycemia, glycosuria, raised BUN or creatinine, fatigue, muscle cramps or spasm, weakness, restlessness, chills, and acute gouty attacks. **Usual Initial Once-Daily Dosages:** mild to moderate essential hypertension—2½ to 5 mg; edema of cardiac failure—5 to 10 mg; edema of renal disease—5 to 20 mg. Dosage adjustment may be necessary during the course of therapy. **How Supplied:** Tablets, 2½, 5 and 10 mg.

References:

- 1 Dornfeld L, Kane R: Metolazone in essential hypertension. The long-term clinical efficacy of a new diuretic. *Curr Ther Res* 18: 527-533, 1975
- 2 Data on file, Medical Department, Pennwalt Prescription Products

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Pharmaceutical Division
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Rochester New York 14603

DYAZIDE[®]

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Each capsule contains 50 mg. of Dyrenium[®] (triamterene, SK&F Co.) and 25 mg. of hydrochlorothiazide.

MAKES SENSE FOR LONG-TERM CONTROL OF HYPERTENSION*

**LOWERS
BLOOD
PRESSURE**

**CONSERVES
POTASSIUM**

Before prescribing, see complete prescribing information in SK&F Co. literature or PDR. A brief summary follows:

* WARNING

This fixed combination drug is not indicated for initial therapy of edema or hypertension. Edema or hypertension requires therapy titrated to the individual patient. If the fixed combination represents the dosage so determined, its use may be more convenient in patient management. The treatment of hypertension and edema is not static, but must be reevaluated as conditions in each patient warrant.

* **Indications:** When the fixed combination represents the dosage determined by titration: Adjunctive therapy in edema associated with congestive heart failure, hepatic cirrhosis, the nephrotic syndrome. Corticosteroid and estrogen-induced edema, idiopathic edema; hypertension, when the potassium-sparing action of its 'Dyrenium' component is warranted.

Contraindications: Further use in progressive renal or hepatic dysfunction; hyperkalemia. Pre-existing elevated serum potassium. Hypersensitivity to either component or other sulfonamide-derived drugs. Routine use of diuretics in otherwise healthy pregnancy.

Warnings: Do not use potassium supplements, dietary or otherwise, unless hypokalemia develops or dietary intake of potassium is markedly impaired. If supplementary potassium is needed, potassium tablets should not be used. Hyperkalemia can occur, and has been associated with

cardiac irregularities. It is more likely in severely ill patients with urine volume less than one liter/day, the elderly or diabetics, with suspected or confirmed renal insufficiency. Periodic determinations of serum K^+ should be made. If hyperkalemia develops, substitute a thiazide alone, restrict K^+ intake. The presence of a widened QRS complex or arrhythmia in association with hyperkalemia requires prompt additional therapy. Thiazides are reported to cross the placental barrier and appear in breast milk; fetal or neonatal hyperbilirubinemia, thrombocytopenia, altered carbohydrate metabolism and other adverse reactions that have occurred in the adult may result. When used in pregnancy or in women who might bear children, weigh potential benefits against possible hazards to fetus. Adequate information on use in children is not available.

Precautions: Do periodic serum electrolyte determinations (particularly important in patients vomiting excessively or receiving parenteral fluids). Periodic BUN and serum creatinine determinations should be made, especially in the elderly, diabetics, or those with suspected or confirmed renal insufficiency. Watch for signs of impending coma in severe liver disease. If spiro-lactone is used concomitantly, determine serum K^+ frequently; both can cause K^+ retention and elevated serum K^+ . Two deaths have been reported with such concomitant therapy (in one, recommended dosage was exceeded, in the other serum electrolytes were not properly monitored). Observe regularly for possible blood dyscrasias, liver damage, other idiosyncratic reactions. Blood dyscrasias have been reported in patients receiving Dyrenium[®] (triamterene, SK&F Co.), and

leukopenia, thrombocytopenia, agranulocytosis and aplastic anemia have been reported with thiazides. Do periodic blood studies in cirrhotic to check for nondrug-related variations in blood pictures, and in patients with folic acid depletion since 'Dyrenium' may contribute to appearance of megaloblastosis. Antihypertensive effect may be enhanced in post-sympathectomy patients. Use cautiously in surgical patients. The following may occur: transient elevated BUN or creatinine or both, hyperglycemia and glycosuria (diabetic insulin requirements may be altered), hyperkalemia and gout, digitalis intoxication (in hyperkalemia), decreasing alkali reserve with possible metabolic acidosis. 'Dyazide' interferes with fluorescent measurement of quinidine.

Adverse Reactions: Muscle cramps, weakness, dizziness, headache, dry mouth; anaphylactic rash, urticaria, photosensitivity, purpura, other dermatological conditions; nausea and vomiting, diarrhea, constipation, other gastrointestinal disturbances. Necrotizing vasculitis, paresthesia, icterus, pancreatitis, xanthopsia and, rarely, allergic pneumonitis have occurred with thiazides alone.

Supplied: Bottles of 100 and 1000 capsules. Single Unit Packages of 100 (intended for institutional use only).

SK&F CO., Carolina, P.R. 00630
Subsidiary of SmithKline Corporation

TRIAMTERENE CONSERVES POTASSIUM WHILE HYDROCHLOROTHIAZIDE LOWERS BLOOD PRESSURE

THE ANXIETY-SPECIFIC.

- a predictable pattern of patient response
- seldom associated with serious side effects, in proper dosage
- rarely interferes with mental acuity
- used concomitantly with many primary medications
- three dosage strengths meet most patient needs

LIBRIUM® chlordiazepoxide HCl/Roche 5mg, 10mg, 25mg capsules

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Relief of anxiety and tension occurring alone or accompanying various disease states.

Contraindications: Patients with known hypersensitivity to the drug.

Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. As with all CNS-acting drugs, caution patients against hazardous occupations requiring complete mental alertness (e.g., operating machinery, driving). Though physical and psychological dependence have rarely been reported on recommended doses, use caution in administering to addiction-prone individuals or those who might increase dosage; withdrawal symptoms (including convulsions), following discontinuation of the drug and similar to those seen with barbiturates, have been reported.

Usage in Pregnancy: Use of minor tranquilizers during first trimester should almost always be avoided because of increased risk of congenital malformations as suggested in several studies. Consider possibility of pregnancy when instituting therapy; advise patients to discuss therapy if they intend to or do become pregnant.

Precautions: In the elderly and debilitated, and in children over six, limit to smallest effective dosage (initially 10 mg or less per day) to preclude ataxia or oversedation, increasing gradually as needed and tolerated. Not recommended in children under six. Though generally not recommended, if combination therapy with other psycho-

Libritabs® (chlordiazepoxide) available in 5 mg, 10 mg and 25 mg tablets.



tropics seems indicated, carefully consider individual pharmacologic effects, particularly in use of potentiating drugs such as MAO inhibitors and phenothiazines. Observe usual precautions in presence of impaired renal or hepatic function. Paradoxical reactions (e.g., excitement, stimulation and acute rage) have been reported in psychiatric patients and hyperactive aggressive children. Employ usual precautions in treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation have been reported very rarely in patients receiving the drug and oral anticoagulants; causal relation-

ship has not been established clinically.

Adverse Reactions: Drowsiness, ataxia and confusion may occur, especially in the elderly and debilitated. These are reversible in most instances by proper dosage adjustment, but are also occasionally observed at the lower dosage ranges. In a few instances syncope has been reported. Also encountered are isolated instances of skin eruptions, edema, minor menstrual irregularities, nausea and constipation, extrapyramidal symptoms, increased and decreased libido—all infrequent and generally controlled with dosage reduction; changes in EEG patterns (low-voltage fast activity) may appear during and after treatment; blood dyscrasias (including agranulocytosis), jaundice and hepatic dysfunction have been reported occasionally, making periodic blood counts and liver function tests advisable during protracted therapy.

Usual Daily Dosage: Individualize for maximum beneficial effects. *Oral—Adults:* Mild and moderate anxiety and tension, 5 or 10 mg *t.i.d.* or *q.i.d.*; severe states, 20 or 25 mg *t.i.d.* or *q.i.d.* *Geriatric patients:* 5 mg *b.i.d.* to *q.i.d.* (See Precautions.)

Supplied: Librium® (chlordiazepoxide HCl) Capsules, 5 mg, 10 mg and 25 mg—bottles of 100 and 500; Tel-E-Dose® packages of 100, available in trays of 4 reverse-numbered boxes of 25, and in boxes containing 10 strips of 10; Prescription Paks of 50, available singly and in trays of 10.

Libritabs® (chlordiazepoxide) Tablets, 5 mg, 10 mg and 25 mg—bottles of 100 and 500. With respect to clinical activity, capsules and tablets are indistinguishable.



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Nutley, New Jersey 07110

Please see following page.

THE ANXIETY-SPECIFIC.

Since its discovery in the research laboratories at Roche, Librium has been the object of ongoing pharmacologic and clinical investigation.

The published record on Librium is enormous. So large, in fact, we put it into a computer literature retrieval system to make it more accessible in answering your inquiries.*

It's a record that reveals a consistent pattern of patient response. A highly favorable benefits-to-risk ratio. And minimal interference with many primary medications.

Doing one thing well. Basically, that's what Librium is all about.

LIBRIUM[®] 
chlordiazepoxide HCl/Roche



*If you have a question about Librium or any other Roche product, write to Professional Services, Roche Laboratories, Nutley, New Jersey 07110.

Please see preceding page for a summary of product information.



March 1977
Volume 75
Number 3

Article on Hydrochloric Acid Debated;
News Features Special House Session,
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A character all its own.



Valium (diazepam) is a benzodiazepine with a character all its own.

Pharmacologically, it has been described as more potent mg-per-mg than other available anxiolytic benzodiazepines. Pharmacokinetically, only Valium provides active *diazepam* as well as the active metabolites 3-hydroxydiazepam, desmethyldiazepam and oxazepam.

But the individual character of Valium is even more apparent clinically than pharmacokinetically. And far more significant. That's because of the patient response obtained with Valium. A response which brings a calmer frame of mind. A response which has a pronounced effect on the somatic symptoms of anxiety, particularly muscular tension. A response which helps the patient feel more like himself again because of the way Valium reduces the overwhelming symptoms of anxiety and psychic tension.

Another important aspect of the clinical character of Valium is safety. Though drowsiness, ataxia and fatigue are possible, these and more serious side effects are rarely a problem. Of course, as with all CNS-acting drugs, patients taking Valium should be cautioned against driving, operating dangerous machinery or the simultaneous ingestion of alcohol.

Unquestionably, many psychotherapeutic agents, including other benzodiazepines, have antianxiety effects. But one fact remains: you get a certain kind of patient response with Valium. It's a response you want. A response you know. A response you trust as part of your overall management of anxiety and psychic tension.

Valium[®] (diazepam)^{IV}

2-mg, 5-mg, 10-mg scored tablets
**a prudent choice in psychic
tension and anxiety**

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Tension and anxiety states; somatic complaints which are concomitants of emotional factors; psychoneurotic states manifested by tension, anxiety, apprehension, fatigue, depressive symptoms or agitation; symptomatic relief of acute agitation, tremor, delirium tremens and hallucinosis due to acute alcohol withdrawal; adjunctively in skeletal muscle spasm due to reflex spasm to local pathology; spasticity caused by upper motor neuron disorders; athetosis; stiff-man syndrome; convulsive disorders (not for sole therapy).

Contraindicated: Known hypersensitivity to the drug. Children under 6 months of age. Acute narrow angle glaucoma; may be used in patients with open angle glaucoma who are receiving appropriate therapy.

Warnings: Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anticonvulsant medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms (similar to those with barbiturates and alcohol) have occurred following abrupt discontinuance (convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). Keep addiction-prone individuals under careful surveillance because of their predisposition to habituation and dependence.

Usage in Pregnancy: Use of minor tranquilizers during first trimester should almost always be avoided because of increased risk of congenital malformations as suggested in several studies. Consider possibility of pregnancy when instituting therapy; advise patients to discuss therapy if they intend to or do become pregnant.

Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed; drugs such as phenothiazines, narcotics, barbiturates, MAO inhibitors and other antidepressants may potentiate its action. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.

Side Effects: Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.



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MARCH BUYERS GUIDE FOR JOURNAL OF KMA

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MESSAGE FROM THE PRESIDENT



I am taking this opportunity to address all of you who are members of KMA and asking that you pass this message to those of your physician acquaintances who are not KMA members. This is the time of year when many of you have second thoughts about whether you want to join KMA for the first time or whether you want to retain your present membership. You say, "What has KMA or the AMA ever done for me?" You object because the dues are so high. You complain that the KMA and AMA do not speak for you and that they move in directions opposite to your way of thinking. You say that only a small group runs KMA and AMA. Fortunately, this is only what a few of you say, but the number is great enough that some clarification needs to be made.

KMA is representative of every physician practicing in the Commonwealth. Every specialty, every family practitioner, the teaching profession, medical students, and physicians in training make up KMA. KMA through its staff, its officers, and numerous physician committees is constantly at work on your behalf. It is at work to keep Continuing Medical Education a function of KMA; it is still trying to get liability insurance coverage for every practicing physician at a rate that is reasonable. It constantly solicits reasonable fees for Medicare and Medicaid services. KMA is fighting the National Health Planning Law, forceful placement of physicians in rural and ghetto practice, indiscriminate use of physician extenders without adequate medical supervision, and numerous other problems that affect all of us. We are trying to keep the federal and state governments from further intrusion into your medical practice and your medical records.

We have not been completely successful in all of our programs either for stopping or reversing action but we have been successful enough to make it worthwhile to keep trying.

Most of you who will read this article are active participants in KMA and don't mind the cost of membership because you believe we are accomplishing something. Won't you help convince those who don't believe? Medical association dues are some of the lowest of any professional organization. You, through your elected delegates, do the speaking for KMA. Membership in your county society is possible only if you are also a member of KMA. No other organization speaks for you in as great numbers. Send in your membership dues today if you have not done so already. The deadline is April 1st. And go all the way—join AMA also. Through the aid of your KMA referendum last year you voted against **mandatory** AMA membership; now we need you to **voluntarily** help 144,000 other physicians speak and work on the national level. If you are not a member you have much less voice in controlling your practice and are letting someone else do it; then you criticize him. Let's stick together and work together.

Paul J. Parks



POSTGRADUATE OPPORTUNITIES



IN KENTUCKY

MARCH

- 17-18 Sixth Medical Aspects of Sports Seminar, Executive Inn, Louisville
- 21-25 "Practical Microsurgery," University of Louisville Department of Surgery, Health Sciences Center, Louisville
- 22 "Diagnosis and Management of Congestive Heart Failure," 7 p.m., sponsored by the Letcher County Medical Society, Whitesburg Appalachian Regional Hospital, Whitesburg
- 23 "Snake Bites and Allergic Reactions to Insect Stings,"** Louisville Area CME Consortium, Health Sciences Center, Louisville
- 28 W. O. Johnson Lecture,** Health Sciences Center, Louisville
- 30-31 23rd Annual Heart Symposium on Cardiovascular Diseases, Health Sciences Center, Louisville

APRIL

- 6 "Current Aspects of Atherosclerotic Heart Disease,"** PCP Series, Health Sciences Center, Louisville
- 7 22nd Annual Clinical Conference, "Newer Approaches to Allergic Disorders," Lexington Clinic, Lexington
- 15 Fifth Annual C. Dwight Townes Memorial Seminar,** Health Sciences Center, Louisville
- 15-16 "Endocrinology for the Practicing Physician,"** Fee: \$75. University of Kentucky Medical Center, Lexington
- 20 "New Concepts in Infertility,"** PCP Series, Health Sciences Center, Louisville
- 21-22 "The Menopausal Syndrome: Physiology and Therapy,"* Fee: \$100. Hyatt Regency, Lexington
- 26 "Chemotherapy for Gynecologic Malignancies," 7 p.m., sponsored by the Letcher County Medical Society, Whitesburg Appalachian Regional Hospital, Whitesburg
- 26-27 "Establishing Yourself in Medical Practice" Workshop for Senior Residents, Ramada Inn-Bluegrass Convention Center, Louisville
- 27 "Metabolic Bone Disease,"** Louisville Area CME Consortium, Health Sciences Center, Louisville

- 28-May 2 Modern Management of Major Problems in Surgery, University of Louisville Department of Surgery, Galt House, Louisville
- 28-30 Third Postgraduate Course in High Risk Pregnancy,** Health Sciences Center, Louisville

MAY

- 4 Diabetes Seminar,** University of Louisville Health Sciences Center, Louisville
- 11-14 Annual Meeting, Kentucky Academy of Family Physicians, Ramada Inn/Bluegrass Convention Center, Louisville
- 18-20 Symposium on Radiology of the Non-Traumatized Emergency Room Patient,* Fee: \$250. Hyatt Regency, Lexington
- 19-21 Spring meeting, Kentucky Surgical Society, Lake Barkley State Park
- 25-26 KMA Emergency Medical Care Seminar, Ramada Inn/Bluegrass Convention Center, Louisville
- 26-27 "Pediatric Chest Problems,"* Fee: To be determined. Hyatt Regency, Lexington

JUNE

- 1 "Hypertension—Workup and Management,"** Louisville Area CME Consortium, Health Sciences Center, Louisville
- 9-11 Wangenstein Surgical Symposium,* Fee: \$200. University of Kentucky Medical Center, Lexington

IN SURROUNDING STATES

APRIL

- 1 "Electrolytes and Fluids," Bristol Memorial Hospital Symposium, Holiday Inn Convention Center, Bristol, Virginia. Contact: Fred V. Vance, Jr., M.D., 210 Memorial Drive, Bristol, Tennessee 37620.
- 22-23 Symposium on Gynecologic Oncology and Eighth Annual Whitacre Lecture, Sarratt Center, Vanderbilt University Campus, Nashville, Tennessee. Contact: Vanderbilt Continuing Education, 305 Medical Arts Building, Nashville, Tennessee 37212.

LOOK AHEAD

- June 18-23, AMA Annual Convention, San Francisco
- September 27-29, KMA Annual Meeting, Louisville

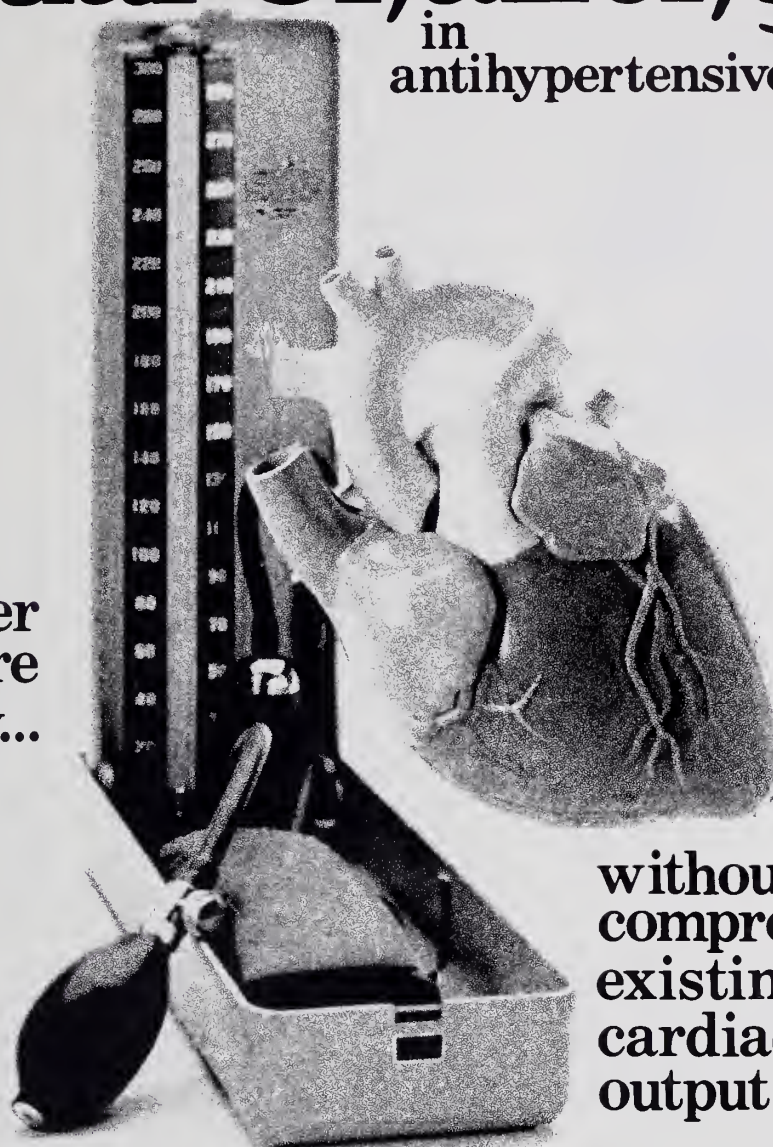
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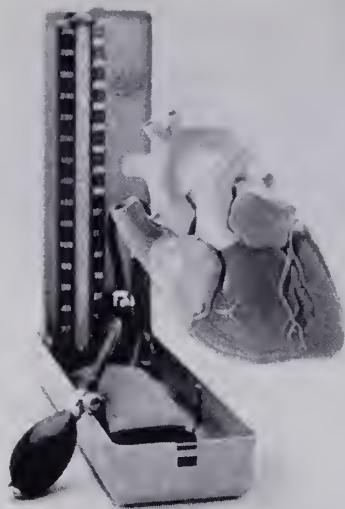
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Warnings: It is important to recognize that a positive Coombs test, hemolytic anemia, and liver disorders may occur with methyldopa therapy. The rare occurrences of hemolytic anemia or liver disorders could lead to potentially fatal complications unless properly recognized and managed. Read this section carefully to understand these reactions.

With prolonged methyldopa therapy, 10% to 20% of patients develop a positive direct Coombs test, usually between 6 and 12 months of therapy. Lowest incidence is at daily dosage of 1 g or less. This on rare occasions may be associated with hemolytic anemia, which could lead to potentially fatal complications. One cannot predict which patients with a positive direct Coombs test may develop hemolytic anemia. Prior existence or development of a positive direct Coombs test is not in itself a contraindication to use of methyldopa. If a positive Coombs test develops during methyldopa therapy, determine whether hemolytic anemia exists and whether the positive Coombs test may be a problem. For example, in addition to a positive direct Coombs test there is less often a positive indirect Coombs test which may interfere with cross matching of blood.

At the start of methyldopa therapy, it is desirable to do a blood count (hematocrit, hemoglobin, or red cell count) for a baseline or to establish whether there is anemia. Periodic blood counts should be done during therapy to detect hemolytic anemia. It may be useful to do a direct Coombs test before therapy and at 6 and 12 months after the start of therapy. If Coombs-positive hemolytic anemia occurs, the cause may be methyldopa and the drug should be discontinued. Usually the anemia remits promptly. If not, corticosteroids may be given and other causes of anemia should be considered. If the hemolytic anemia is related to methyldopa, the drug should not be reinstituted. When methyldopa causes Coombs positivity alone or with hemolytic anemia, the red cell is usually coated with gamma globulin of the IgG (gamma G) class only. The positive Coombs test may not revert to normal until weeks to months after methyldopa is stopped.

Should the need for transfusion arise in a patient receiving methyldopa, both a direct and an indirect Coombs test should be performed on his blood. In the absence of hemolytic anemia, usually only the direct Coombs test will be positive. A positive direct Coombs test alone will not interfere with typing or

cross matching. If the indirect Coombs test is also positive, problems may arise in the major cross match and the assistance of a hematologist or transfusion expert will be needed.

Fever has occurred within first 3 weeks of therapy, sometimes with eosinophilia or abnormalities in liver function tests, such as serum alkaline phosphatase, serum transaminases (SGOT, SGPT), bilirubin, cephalin cholesterol flocculation, prothrombin time, and bromsulphalein retention. Jaundice, with or without fever, may occur, with onset usually in the first 2 to 3 months of therapy. In some patients the findings are consistent with those of cholestasis. Rarely fatal hepatic necrosis has been reported. These hepatic changes may represent hypersensitivity reactions; periodic determination of hepatic function should be done particularly during the first 6 to 12 weeks of therapy or whenever an unexplained fever occurs. If fever and abnormalities in liver function tests or jaundice appear, stop therapy with methyldopa. If caused by methyldopa, the temperature and abnormalities in liver function characteristically have reverted to normal when the drug was discontinued. Methyldopa should not be reinstituted in such patients.

Rarely, a reversible reduction of the white blood cell count with primary effect on granulocytes has been seen. Reversible thrombocytopenia has occurred rarely. When used with other antihypertensive drugs, potentiation of antihypertensive effect may occur. Patients should be followed carefully to detect side reactions or unusual manifestations of drug idiosyncrasy.

Use in Pregnancy: Use of any drug in women who are or may become pregnant requires that anticipated benefits be weighed against possible risks; possibility of fetal injury can not be excluded.

Precautions: Should be used with caution in patients with history of previous liver disease or dysfunction (see Warnings). May interfere with measurement of: uric acid by the phosphotungstate method, creatinine by the alkaline picrate method, and SGOT by colorimetric methods. Since methyldopa causes fluorescence in urine samples at the same wavelengths as catecholamines, falsely high levels of urinary catecholamines may be reported. This will interfere with the diagnosis of pheochromocytoma. It is important to recognize this phenomenon before a patient with a possible pheochromocytoma is subjected to surgery. Methyldopa is not recommended for patients with pheochromocytoma. Urine exposed to air after voiding may darken because of breakdown of methyldopa or its metabolites.

Stop drug if involuntary choreoathetotic movements occur in patients with severe bilateral cerebrovascular disease. Patients may require reduced doses of anesthetics; hypotension occurring during anesthesia usually can be controlled with vasopressors. Hypertension has recurred after dialysis in patients on methyldopa because the drug is removed by the procedure.

Adverse Reactions: Central nervous system: Sedation, headache, asthenia or weakness, usually early and transient; dizziness, lightheadedness; symptoms of cerebrovascular insufficiency; paresthesias, parkinsonism, Bell's palsy, decreased mental acuity, involuntary choreoathetotic movements; psychic disturbances, including nightmares; and reversible mild psychoses or depression.

Cardiovascular: Bradycardia, aggravation of angina pectoris. Orthostatic hypotension (decrease daily dosage). Edema (and weight gain) usually relieved by use of a diuretic. (Discontinue methyldopa if edema progresses or signs of heart failure appear.)

Gastrointestinal: Nausea, vomiting, distention, constipation, flatulence, diarrhea, mild dryness of mouth, sore or "black" tongue, pancreatitis, sialadenitis.

Hepatic: Abnormal liver function tests, jaundice, liver disorders.

Hematologic: Positive Coombs test, hemolytic anemia. Leukopenia, granulocytopenia, thrombocytopenia.

Allergic: Drug-related fever, myocarditis.

Other: Nasal stuffiness, rise in BUN, breast enlargement, gynecomastia, lactation, impotence, decreased libido, dermatologic reactions including eczema and lichenoid eruptions, mild arthralgia, myalgia.

Note: Initial adult dosage should be limited to 500 mg daily when given with antihypertensives other than thiazides. Tolerance may occur, usually between second and third month of therapy; increased dosage or adding a thiazide frequently restores effective control. Patients with impaired renal function may respond to smaller doses. Syncope in older patients may be related to increased sensitivity and advanced arteriosclerotic vascular disease; this may be avoided by lower doses.

How Supplied: Tablets, containing 125 mg methyldopa each, in bottles of 100; Tablets, containing 250 mg methyldopa each, in single-unit packages of 100 and bottles of 100 and 1000; Tablets, containing 500 mg methyldopa each, in single-unit packages of 100 and bottles of 100.

For more detailed information, consult your MSD representative or see full prescribing information. Merck Sharp & Dohme, Division of Merck & Co., Inc., West Point, Pa. 19486

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MSD MERCK SHARP & DOHME

Letters to the Editor

The Letters To The Editor column is a means for the KMA physicians to express their opinions and viewpoints on varied topics. If you have an item you would like brought before your fellow practitioners, please submit it to Letters To The Editor, Kentucky Medical Association, 3532 Ephraim McDowell Dr., Louisville, Kentucky 40205. Communications should not exceed 250 words. The right to abstract or edit is reserved by the editors of *The Journal*. Names will be withheld upon request, but anonymous letters will not be accepted.

Dear Editor:

As a relatively younger member of the Kentucky Medical Association, I welcomed the opportunity to contribute to KEMPAC after I became a member of the KMA. The longer that I remained a member of KEMPAC the more aware I became that I never found out what was happening with my \$35.00 a year or who I should be supporting based on the investigation that I was led to believe that KEMPAC was doing concerning the candidates' various stands on medicine. As time went on I became more confused and for the past two years I have not contributed to KEMPAC.

During this period of time I have had ample opportunity to discuss this with my fellow colleagues, with past members of the KEMPAC Board, and even with past presidents of KEMPAC and they have never been able to satisfactorily answer some of the questions that I am about to pose to you.

(1) Why can't KEMPAC inform the members

of their organization concerning medicine? I realize that their opinions can be obtained by searching local newspapers etc., but many of us don't have the time to make this determination. (2) Why do we often support two candidates for the same post when many times one of them is clearly anti-medicine? (3) I question whether the KEMPAC Board is more Republican than Democrat than it is medicine or anti-medicine, and many times pro-medicine candidates are not supported completely because of interference on the part of physicians of the opposite political party.

There are many more questions that have arisen concerning this subject. All of us in medicine realize the importance of political heft, but many of us are beginning to think that our dollars are being used to provide political heft for certain individuals rather than for medicine or the Kentucky Medical Association as a whole.

I am not trying to imply that I do not have confidence in members of the KEMPAC Board, but I am implying that communication between the KEMPAC Board and the members of the organization apparently has not been adequate or more than 600 doctors would feel a need to support the organization.

Until the medical community of this state feels that each dollar is going to candidates that are pro-medicine, and there is some evidence that this is taking place, I am afraid that the medical community's response to KEMPAC will remain unchanged.

Ronald E. Walldridge, M.D.
No. 5 Village Plaza
Shelbyville, Kentucky 40065

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Tedral Elixir: each 5 ml teaspoonful contains 32.5 mg theophylline, 6 mg ephedrine hydrochloride, and 2 mg phenobarbital; the alcohol content is 15%.

Indications. Tedral, Tedral SA, and Tedral Elixir are indicated for the symptomatic relief of bronchial asthma, asthmatic bronchitis, and other bronchospastic disorders. They may also be used prophylactically to abort or minimize asthmatic attacks and are of value in managing occasional, seasonal or perennial asthma.

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These Tedral formulations are adjuncts in the total management of the asthmatic patient. Acute or severe asthmatic attacks may necessitate supplemental therapy with other drugs by inhalation or other parenteral routes.

Contraindications. Sensitivity to any of the ingredients; porphyria.

Warnings. Drowsiness may occur. PHENOBARBITAL MAY BE HABIT-FORMING.

Precautions. Use with caution in the presence of cardiovascular disease, severe hypertension, hyperthyroidism, prostatic hypertrophy, or glaucoma.

Adverse Reactions. Mild epigastric distress, palpitation, tremulousness, insomnia, difficulty of micturition, and CNS stimulation have been reported.

Average Dosage. *Prophylactic or Therapeutic.*

Tedral: *Adults*—One or two tablets every 4 hours. *Children*—(Over 60 lb) one-half the adult dose.

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Supplied. Tedral: White, uncoated scored tablets in bottles of 24 (N 0047-0230-24), 100 (N 0047-0230-51) and 1000 (N 0047-0230-60). Also in Unit Dose—package of 10 x 10 strips (N 0047-0230-11).

Tedral SA: Double-layered, uncoated, coral/mottled white tablets in bottles of 100 (N 0047-0231-51) and 1000 (N 0047-0231-60). Also in Unit Dose—package of 10 x 10 strips (N 0047-0231-11).

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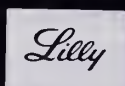
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VOLUME 75

MARCH 1977

No. 3

Lithium and Diuretics

MYRON G. SANDIFER, M.D.*
Lexington, Kentucky

This paper discusses the potential hazards of lithium—diuretic combinations. The combination is not, however, absolutely contraindicated as will be shown.

LITHIUM may be used in the treatment of mild to moderate mania, but the important use, for purposes of this paper, is in the prevention of attacks of mania and/or depression by maintenance doses of lithium. Such patients are ordinarily taking 900 mg to 1800 mg of lithium carbonate daily and usually have serum lithium levels of 0.8 mEq/l (± 0.3 mEq/l). Under carefully controlled conditions, lithium has few side effects. At the appropriate serum level a patient may have a mild polyuria or a slight tremor, but these symptoms are usually of little consequence. At higher serum lithium levels, sometimes at 1.5 mEq/l, but more frequently above 2.0 mEq/l, symptoms of toxicity begin to appear. The first stage is nausea, vomiting, and/or diarrhea. Fortunately, this stage precedes the more serious second stage of neurological side effects, which range from mild ataxia to confusion and coma.

Interaction of Lithium and Diuretics

When diuretics are given to patients on maintenance lithium, elevations of serum lithium occur and severe toxicity may result. In two of the cases which have been reported, there was the onset, over a period of a few days, of nausea, vomiting, and diarrhea followed by ataxia, slurred

speech, and confusion.^{1,2} Serum lithium levels, which had previously been very stable at therapeutic levels, were elevated into the toxic range. Symptoms gradually subsided over a period of several days when medications were discontinued. (Central nervous symptoms may persist several days after serum lithium has fallen to low levels because of the slower clearing of lithium from nervous tissue).

Mechanisms of Lithium—Diuretic Interaction

Reabsorption of lithium in the proximal tubules is closely associated with sodium reabsorption.³ A low sodium diet reduces the renal excretion of lithium.⁴ Diuretics apparently affect lithium reabsorption in the same way. For example, the long term administration of thiazides reduces lithium clearance by about 25%.⁵ Over a period of one to two weeks ordinary doses of thiazides may **double** the serum lithium.⁶ Among diuretics, thiazides have been more extensively studied for their effect on lithium retention, but presumably any diuretic which increases sodium excretion increases lithium retention. It has been postulated that as sodium depletion begins to occur there is a compensatory increase in both sodium and lithium reabsorption in the proximal tubule (where the two ions are handled almost identically).^{3,5} This increased reabsorption is then manifested by decreased lithium clearance and increased serum levels.

Treatment of Lithium Toxicity

From the above, it might be assumed that the more serious cases of lithium toxicity (those requiring more than discontinuation of medications) would respond to sodium loading. This,

*Professor of Psychiatry and Family Practice, University of Kentucky Medical Center, Lexington
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however, has not proved to be the case. The increased lithium excretion for sodium loading occurs too slowly to benefit the severely toxic patient. For the treatment of lithium toxicity Thomsen and Schou advocate: "Osmotic diuresis, alkalization of the urine and administration of aminophylline, . . . which may be used individually or together".⁷ Dialysis may also be used in the most severe cases.

Combined Use of Lithium and Diuretics

Perhaps curiously, there is a specific indication for the combined use of lithium and thiazides: the treatment of lithium induced nephrogenic diabetes insipidus. This uncommon complication of lithium therapy is refractory to vasopressin and chlorpropamide but is responsive to thiazides.⁸

The most common occasion for the combined use of lithium and diuretics is the manic-depressive patient who is also found to be hypertensive. One approach to this therapeutic problem is to avoid diuretics altogether—e.g., treat the patient's hypertension with propranolol. Sometimes this is successful, but most of the time it is likely that the hypertensive patient will also need a diuretic. A diuretic can be safely added if the daily dose of lithium is **lowered** prior to starting diuretic therapy. A 50% reduction in lithium dosage is recommended, with serum lithium determinations being done frequently over the next three weeks. The lithium dosage may then have to be adjusted upward. The 50% reduction is recommended to enhance safety.

If the patient's problems present in the opposite order, hypertension and diuretic therapy first, then lithium therapy, the situation is not so

complex. Lithium may be safely added, but lower doses of lithium will ordinarily be required (to achieve satisfactory lithium levels) than in the patient not receiving diuretics. Not quite the same expectation of an uncomplicated course can be held if the patient is elderly or has any manifestation of congestive heart failure. Such patients require even more careful observation and absolutely controlled conditions of medication intake.

The principal potential hazard described in this paper, the addition of a diuretic to a patient receiving lithium, is most likely to occur if the simultaneous administration of the two drugs is not known or the drug interaction not appreciated. As is so often the case, a careful drug history is a bulwark against potential problems.

Finally, this paper should not be construed as advocating the widespread use of lithium therapy. Lithium is a valuable drug for the right patient, but careful consideration and consultation should precede the initiation of therapy.

References

1. Macfie, A. C.: Lithium poisoning precipitated by diuretics. *Br Med J* 2:516, March, 1975.
2. Lutz, E.G.: Lithium toxicity precipitated by diuretics. *J Med Soc N J* 72:439-440, May, 1975.
3. Singer, I., et al: Mechanisms of lithium action. *New Engl J Med*, 289:254-260, August, 1975.
4. Demers, R.G., et al: The effects of dietary sodium on renal lithium excretion in the manic-depressive. *Dis Nerv Syst*, 31:372-375, June, 1972.
5. Peterson, V., et al: Effect of prolonged thiazide treatment on renal lithium clearance. *Br Med J*, 3:143-145, 1974.
6. Himmelhoch, J.M., et al: Thiazide-lithium synergy in refractory mood swings. *Am J Psych* 134:149-152, Feb. 1977.
7. Thomsen, K., et al: Renal lithium excretion in man. *Amer J Physiol*, 215:823-827, October, 1968.
8. Forrest, J.N., Jr., et al: On the mechanism of lithium-induced diabetes insipidus in man and the rat. *J Clin Invest*, 53:1115-1123, April, 1974.

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Hydrochloric Acid for the Correction of Severe Metabolic Alkalosis: An Alternate Approach

CURTIS A. JOHNSON, PHARM.D.* and JAMES C. CLOYD, PHARM.D.**
Lexington, Kentucky

Severe, unresponsive metabolic alkalosis presents a therapeutic dilemma to the physician. This article discusses the indications, uses, and precautions of intravenous hydrochloric acid, ammonium chloride, and arginine monohydrochloride therapy in the treatment of those patients in which the alkalosis is not corrected by more conventional methods.

METABOLIC alkalosis results from either an abnormal loss of acid or an excessive retention of alkali. This disorder is most frequently caused by loss of hydrogen and chloride through vomiting or gastric lavage, loss of potassium in response to diuretic or steroid therapy, hyperaldosteronism, or prolonged intravenous alimentation with potassium-free solutions.^{1,2} While a single etiologic factor can frequently be identified, occasionally there may be multiple causes which may be responsible for the disorder.

Conventional therapy for metabolic alkalosis is aimed at meeting the immediate fluid and electrolyte needs of the patient. Since the condition is almost always characterized by dehydration and a deficit in chloride and/or potassium, it becomes necessary to administer fluids containing appropriate electrolytes. Metabolic alkalosis caused by a loss of gastric juice will represent a chloride loss. If however, the metabolic alkalosis is secondary to diuretic therapy or hyperaldosteronism, potassium replacement will be necessary.

Dehydration should be corrected by administration of salt and water. Administration of saline in mild metabolic alkalosis is usually sufficient therapy, since the kidney will attempt to retain chloride and excrete excess bicarbonate.

In moderate cases of metabolic alkalosis, in which there are both potassium and chloride deficits, it becomes necessary to administer intravenous potassium chloride. This can be done at a rate generally not to exceed 20 mEq per hour. Of course serum potassium levels must be carefully monitored.

Editorial comments on this
article appear on pages 127-128

Most patients with mild to moderate metabolic alkalosis will adequately respond to conventional therapy. On occasion, however, the physician may encounter the unresponsive, severely alkalemic patient who will require additional or alternate therapeutic measures. This paper will review those agents which are available for use when the patient fails to respond to more standard therapy.

Other than conventional electrolyte solutions, there are few pharmacologic agents available to treat severe, unresponsive metabolic alkalosis. In general, these agents work by directly or indirectly providing hydrogen ions to the extracellular fluid. In this review, we will report the use of intravenous hydrochloric acid as a direct means of restoring acid-base balance. In addition, the use of ammonium chloride and arginine monohydrochloride, which indirectly corrects alkalosis, will be discussed.

In an attempt to provide a direct correction of metabolic alkalosis, Aboune³ and others,^{4,6} have reported a limited number of cases treated with hydrochloric acid solutions. The direct administration of hydrogen and chloride ions enables the

*Assistant Professor, College of Pharmacy, University of Kentucky, Lexington

**Assistant Professor, College of Pharmacy, University of Minnesota, Minneapolis

physician to bypass hepatic mechanisms otherwise required for acid-base normalization. This may offer some advantage in certain patients, especially those with hepatic disorders. Abouna's procedure has been endorsed subsequently as an appropriate means of therapy in selected individuals.⁷

Hydrochloric acid solutions ranging from 0.1N to 0.2N have been used without serious complications.³⁻⁶ Electrolytes, as well as blood gases, should be followed closely during the infusion. The most serious reported side effect has been phlebitis at the injection site. Because of the extremely low pH of the solution (pH 1-1.5) it should be infused into a deep, central vein. Frick and Senning⁶ demonstrated at autopsy in one patient who died from cerebral hemorrhage and had received 0.2N HCl, that there was no evidence of HCl-induced vascular damage.

The amount of hydrochloric acid infused is governed by the subsequent decline of the pH. Usually HCl is given until the pH and electrolyte indices have returned to normal. An alternative approach has been suggested by Hacken, et al,⁴ who have approximated the dose of hydrochloric acid to be given by the chloride deficit if the disorder is accompanied by hypochloremia. The extracellular chloride deficit is given by the following formula:

$$Cl_{def} = (0.2 \times BW) \times (103 - Cl_{obs})$$

Where Cl_{def} is the chloride deficit in the extracellular pool, BW is body weight in kilograms, and Cl_{obs} is the observed plasma chloride concentration. Once the chloride deficit has been calculated, the hydrochloric acid dose can be determined.

For example, if a patient has a plasma chloride concentration of 83 mEq/L and weighs 176 lbs (80 kg) then his chloride deficit would be as follows:

$$\begin{aligned} Cl_{def} &= (0.2 \times 80) \times (103 - 83) \\ &= 16 \times 20 \\ &= 320 \text{ mEq} \end{aligned}$$

therefore 320 mEq of Cl^- and H^+ should be infused to correct the alkalosis. One liter of a 0.1N solution of hydrochloric acid contains 100 milliequivalents (mEq) H^+ and 100 mEq of Cl^- .^{*} For each one-tenth increase in the con-

centration of the solution, hydrogen and chloride concentrations increase by 100 mEq (e.g., one liter of 0.2N HCl contains 200 mEq of H^+ and 200 mEq of Cl^-). The infusion rate is dependent upon a number of factors such as renal and cardiac status, but regardless of the circumstances the solution should be given over at least a six-hour period.

Since the effect of hydrochloric acid solutions on plastic is not well known, it is recommended that glass IV bottles be used and that IV administration sets be changed as frequently as every 12 hours.

Based upon published information, it would appear that the previously described solutions of hydrochloric acid will provide safe, prompt correction of severe metabolic alkalosis until the underlying cause has been removed.

Intravenous ammonium chloride has also been used to treat unresponsive alkalosis. This product is the combination of a labile cation and a fixed anion ($NH_4^+Cl^-$). The hepatic conversion of an ammonium ion to urea also results in the net formation of a hydrogen ion. The hydrogen ion interacts with a bicarbonate leading to the formation of carbon dioxide. The net desired result is the displacement of bicarbonate by chloride and a return towards normal pH.⁷

Ammonium chloride is available in a solution containing 3 mEq per milliliter. Saline or dextrose intravenous fluids serve as appropriate vehicles for this agent.

Ammonium chloride must be administered slowly, especially to patients with hepatic disease, to prevent central nervous system toxicity caused by rapid elevations of blood ammonium levels. Indeed, severe hepatic insufficiency may be a contraindication of the use of ammonium chloride.

Arginine monohydrochloride is a third agent which has been used successfully for the treatment of severe metabolic alkalosis. Like ammonium chloride, hydrogen ion is liberated from the hepatic metabolism of this agent. However, the arginine has been shown to combine with ammonia to synthesize urea. Thus, it is possible

**Detailed information regarding the preparation of intravenous hydrochloride solutions will be provided upon request by the Drug Information Center, College of Pharmacy, University of Kentucky.*

that arginine may be used in the patient with hepatic insufficiency or coma. Too rapid infusion may cause vomiting. Local irritation at the site of injection is also occasionally encountered.

Three hundred ml of a 10% solution of arginine monohydrochloride supplies 142.5 mEq H^+ and 142.5 mEq Cl^- . However, the commercially available product has not been approved by the FDA for use in metabolic alkalosis. Therefore using this agent for acid-base disorders must be considered investigational at this time.

In summary, it should be clear that the therapy of metabolic alkalosis must be directed to the underlying etiologic disorder. Mild to moderate alkalosis generally will respond to the administration of solutions containing sodium, potassium chloride, and water. However, when faced with a patient unresponsive to standard therapy, the physician may need to select an additional therapeutic agent.

We feel that intravenous hydrochloric acid can be used effectively and safely in most patients with severe metabolic alkalosis. This agent is particularly suited for the patient with hepatic disease. Ammonium chloride also can be a suit-

able agent in the unresponsive patient. However, ammonium chloride must be converted by hepatic metabolism to urea and hydrogen ion. While arginine monohydrochloride appears to be an effective form of therapy, its use must be considered investigational at this time.

References

1. Kassirer, J. P., Serious Acid-Base Disorders, *NEJM* 291:773-776, Oct. 10, 1974.
2. Welt, L. G., Acidosis and Alkalosis, *Harrison's Principles of Internal Medicine*, 7th ed., p. 1356-1367, McGraw-Hill, New York.
3. Abouna, G. M., Veazey, P. R., and Terry, D. B., Intravenous Infusion of Hydrochloric Acid for Treatment of Severe Metabolic Alkalosis, *Surg.* 75:194-202, February, 1974.
4. Harken, A. H., Gabel, R. A., Fencl, V., Moore, F. D., Hydrochloric Acid in the Correction of Metabolic Alkalosis, *Arch. of Surg.* 110:819-821, July, 1975.
5. Beach, F. X. M. and Jones, E. S., Metabolic Alkalosis Treated with Intravenous Hydrochloric Acid, *Postgrad. Med. J.* 47:516-520, July, 1971.
6. Frick, P. G. and Senning, A., The Treatment of Severe Metabolic Alkalosis with Intravenous N/10 or N/5 Hydrochloric Acid, *Deutsche Medizinische Wochenschrift* 9:242-249, June, 1964.
7. Mudge, Gilbert, Diuretics and Other Agents Employed in the Mobilization of Edema Fluid, *The Pharmacological Basis of Therapeutic*, Goodman, L. S. and Gilman, Alfred, eds., 5th ed., MacMillan, New York, 1975, p. 817-847.
8. Editorial, Hydrochloric Acid for Metabolic Alkalosis, *Lancet* 1:720, April 20, 1974.

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Blue Skin Pigmentation and Chlorpromazine

ROLANDO I. HADDAD, M.D.

Jeffersonville, Indiana

A report of blue skin pigmentation following chlorpromazine therapy is reported. The literature on this subject is also briefly reported.

ONE of the adverse reactions reported by the use of Chlorpromazine, (in high dose and for some extended length of time) is the possibility of skin pigmentation. The PDR warns of it as follows: "Rare instances of skin pigmentation have been observed in hospitalized mental patients, primarily females who have received the drug usually for three years or more in dosages ranging from 500 mgms to 1500 mgms daily. The pigmentary changes, restricted to exposed areas of the body, range from an almost imperceptible darkening of the skin to a slate gray color, sometimes with a violet hue. Histological examination reveals a pigment, chiefly in the dermis, which is probably a melanin-like complex. The pigmentation may fade following discontinuance of the drug".

Case Report

A 51-year-old white male was seen for the first time in our out-patient clinic in June 1974 after discharge from the State Hospital. At that time he was receiving Thioridazine, 200 mgms four times a day and Trifluoperazine 5 mgms four times a day.

It was noticed that the color of the skin on the dorsum of the hands were darkly pigmented. His face and forehead were dark blue.

He was admitted for the first time to the State Hospital from December 1957 to April 1958. Then he was re-admitted three more times: From July 1965 to January 1966, from January 1967 to November 1967, and finally from March 1968 to November 1968. He was on convalescent leave from November 1968 until May 1974 when he was finally discharged and referred to our out-patient clinic for followup. The discharge summary read: "He was on Chlorpromazine until October 1970 at which time, following exposure

to sunlight, his skin became extremely dark pigmented. His medication at that time was changed to Thioridazine and Trifluoperazine, and over a period of time there has been a gradual lessening of discoloration." There is no information in regard to the amount of Chlorpromazine received up to 1970, but the patient stressed that he was receiving up to 800 mgms daily. There is no evidence of ingestion of any other drug or alcohol while he was on Chlorpromazine therapy.

The admitting and discharge diagnosis was "Schizophrenia, Paranoid Type." His medication was progressively decreased on an outpatient basis and since April 1975 he has been on Trifluoperazine 5 mgms twice a day and Thioridazine 50 mgms q.h.s. with "drug holiday" on Sunday. The pigmentation has been fading this last year. But still the blue color is remarkable on some exposed areas. Fundoscopic examination was normal and the patient has not complained of any visual impairment or discomfort.

Comment

One of the first articles published in the United States about Chlorpromazine was in May 1954.¹ After that, thousands of papers, articles, reports, etc. have been published in regard to Chlorpromazine.

Reviewing the literature, it seems that abnormal pigmentation associated with Chlorpromazine therapy was reported as early as 1957.²

Chlorpromazine manifests two different reactions to sunlight: 1—Photoallergic, urticarial, maculo-papular eruptions or eczematous reaction involving the skin of the exposed area of the body, can occur with a small amount of the medication. 2—Phototoxic reaction can occur in most individuals, provided there is an adequate concentration of the photosensitizer in the living epidermal cells, an exposure to a specific band of light and oxygen.³

The accumulation of the drug on melanin was first demonstrated by Potts in 1962.⁴

In the eye-skin syndrome⁵ there is hyperpigmentation of the skin, most typically localized to the face, extensor surface of the arms, dorsal surface of the hands and the back of the legs. The

color of the affected areas has been described to vary from diffuse violet to dark blue-dark. (Gremes and Berry, 1964; Hayes et coll., 1964; Zelickson and Zeller, 1964).

It is now generally accepted that the melanin affinity of chloroquine and phenothiazines is the most important factor in the etiology of the toxic retinopathy caused by these drugs. Chloroquine and chlorpromazine induced pigment disturbances in the skin have also been related to accumulations of the drugs on melanin (Tuffanelli et coll., 1963; Sanatone, 1965; Stewart et coll., 1968).

Most patients developing phenothiazine induced pigmentation in ocular tissues have been medicated with chlorpromazine, but this side effect has also been reported in patients receiving Thioridazine (Skiddal 1966, 1968), Trifluoperazine (Margotis and Gable, 1965), Lenomeprazine (Kassman and Watterberg, 1967), and combinations of different phenothiazine derivatives (Barsa et coll., 1965).

In 1964, eight cases, all white females, were reported as having an unusual reaction to chlorpromazine with skin pigmentation.⁶ But the "Purple People" syndrome can occur in males as well as females.^{7,8}

In 1967 a case was reported from India. This was a Hindu male with skin pigmentation, visual impairment and extrapyramidal symptoms due to prolonged use of Chlorpromazine.⁹

In patients with Chlorpromazine-induced general melanosis, the pigment has been found deposited not only throughout the entire reticulo-endothelial system but also in the kidney, heart muscle, and brain.

In the early 60's the prediction for this type of complication was "a high incidence for years to come." A report from Smith Kline and French in 1960 which was updated in 1970 gives an incidence of 1.5% to less than 1% regarding skin and eye pigmentation as a complication of phenothiazine therapy.¹⁰

It has been mentioned and suggested that the drug-induced tardive dyskinesia is caused by accumulation of phenothiazine on the melanosomes in the pigmented nerve cells of substantia nigra and locus coeruleus.^{11,12}

Melanin hyperpigmentation can be associated with deficiency of Vitamin A, Ascorbic Acid and Nicotinamide.¹³ Several mechanisms are involved in drug-induced changes in pigmentation of the

skin. The Tyndall effect (optical changes in the refraction and scattering of incident light) can be obtained when heavy metals are deposited diffusely in the dermis, producing change in color.

Other drugs can produce changes by combining with haemoglobin to form metahaemoglobin. But many times when the pigmentation changes are produced by other drugs the mechanism is unknown.

Chlorpromazine and related phenothiazines as well as anti-malarials, Hydantoin derivatives, some cytostatic agents, ACTH, oral contraceptives, Clofazimine, sulphones, phenolphthalein, nicotinic acid, imipramine, has been mentioned as causal factors involved in skin pigmentation.¹⁴

No treatment has been proven to be effective and or specific to reverse the condition.

Summary

The possibility of skin and eye pigmentation as a complication in patients receiving large amounts of chlorpromazine therapy for extended periods of time has been reported extensively.

A case is presented of a patient with blue color of the skin, mainly on his face and forehead. The condition seems to reverse, to some extent, spontaneously. Chlorpromazine can manifest two different reactions to sunlight. An allergic reaction can develop in a short time and from a small amount of medication. Or it can develop with a larger amount of medication and therapy maintained for years.

The pigmentation of the skin has been reported in association with eye pigmentation.

The incidence seems to be higher in white females living in northern latitudes, but it can occur in other areas and with non-white and male as well.

The prediction two decades ago of possible high incidence of this complication with phenothiazine therapy has failed, fortunately, to be of that magnitude. The incidence has been reported to be 1% or less.

Tardive dyskinesia has been mentioned to be associated with accumulations of phenothiazine on the melanosomes in the pigmented nerve cell of substantia nigra and locus coeruleus.

There is still a question of some "synergistic" interaction between phenothiazine therapy and any other drug and/or condition inducing skin-eye pigmentation.

Although the condition has been associated more frequently with chlorpromazine therapy, it can be induced by other drugs and/or conditions.

Acknowledgement

I am particularly indebted to Ms. Beverly Marmion, University of Louisville librarian, for collecting literature and information.

References

1. Winkelman, N.W., Jr.: Chlorpromazine in the Treatment of Neuropsychiatric Disorders. *JAMA* 155:18-21, 1954.
2. Ambrosio, A.: Results of the Ophthalmoscopic Study of a Group of Patients Treated With Chlorpromazine. *Ann. Ophthalm.*, 83:588-92.
3. Sanatone, A.: Pigmentation due to Phenothiazine in High and Prolonged Dosage. *JAMA*, Vol. 191, No. 4, January 25, 1965, pp. 263-68.
4. Potts, A.A.: The Concentration of Phenothiazine in the

- Eye of Experimental Animals. *Invest. Ophthalm.* 1 (1962 a), 522.
5. Greiner, C. and Berry, K.: Skin Pigmentation and Corneal and Lens Opacities with Prolonged Chlorpromazine Therapy. *Canada Med. Assn. J.*, March 14, 1964, Vol. 90, pp. 663-65.
6. Zelickson, A.S. and Zeller, H.C.: A New and Unusual Reaction to Chlorpromazine. *JAMA*, April 27, 1964.
7. Perry, T. and Culling, C., et al: Hydroxychlorpromazine: Potential Toxic Drug Metabolite in Psychiatric Patients. *Science*, Vol. 146, Oct.-Dec., 1964, pp. 81-83.
8. Robins, A.H.: Phenothiazine Melanosis in Schizophrenic Patients. *Psychopharmacologia (Berl)* 27 (4):327-42, 1972.
9. Adverse Reactions After Prolonged Use of Chlorpromazine. *J. Indiana Medical Association*, Vol. 49, No. 11, Dec. 1, 1967, pp. 542-43.
10. Smith Kline and French, 1970, Questions and Answers Regarding Dermatologic and Ophthalmic Changes in Chronic Mental Patients on Prolonged Substantial Dosages of Chlorpromazine and Other Phenothiazine Tranquilizers.
11. Lindquist, N.G.: Accumulations in Vitro of 35 S-Chlorpromazine in the Neuromelanin of Human Substantia Nigra and Locus Coeruleus. *Arch. Int. Pharmacodyn. Ther.* 200 (1):190-5, Nov., 1972.
12. Accumulation of Drugs on Melanin. *Acta Radiologica*, Stockholm, 1973.
13. Robins H., A.: Skin Melanine Concentrations in Schizophrenia. *Brit. J. Psych.* 1972, 121, 613-17.
14. Levantine, A., Almeyda J.: Drug Induced Changes in Pigmentation. *Br. J. Dermatology* 89 (1):105-12, Jul., 1973.

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EDITORIAL

Hydrochloric Acid — I Disagree!

At the December editorial board meeting it was decided by my fellow editors to publish the article on hydrochloric acid by Curtis Johnson, Pharm.D., et al. I did not concur in this decision.

In this day of therapeutic misadventure it would seem prudent to emphasize therapeutic modalities that are safe by the test of time, reasonably effective, and easily administered. (Nature has and will always be the most effective ally of the ill.)

Hydrochloric acid fails on all three counts. It has to be administered directly into the inferior

vena cava with all the risks attendant upon the subclavian puncture. It has not been used extensively at all and has not been used with any degree of physician facility until the very recent past. And finally and most importantly, there are other methods much less dangerous and just as effective to combat alkalosis. I would predict that hydrochloric acid like sodium bicarbonate as a therapeutic modality will prove to cause more harm than good.

To report and thereby tacitly encourage the use of such an agent is editorial misjudgement.

PCG

Same Subject — Different Opinion

In the consideration for treatment of metabolic alkalosis, one must remember that the corrective mechanisms (suppression of renal acid excretion and increasing renal alkali excretion) are necessarily slow and cannot be relied upon alone for patients with extreme alkalosis. Normally, the concentration of hydrogen ion in the extracellular fluids is maintained within relatively narrow limits by the chemical buffers of the blood, by the lungs, and by the kidneys, in that order. Although most metabolic processes generate excess hydrogen ion, the body is very efficiently geared for the active removal of hydrogen ion and for the retention of bicarbonate. Unfortunately, the mechanisms available for combating alkalosis are much less efficient than those available for combating acidosis and because of this, alkalosis is much more difficult to treat than is acidosis.

Admittedly, mild alkalosis with a pH below 7.5 can be turned around by simply withdrawing the causative agent or condition, and by giving sodium chloride and potassium and waiting for nature to take its course.

Fortunately, severe metabolic alkalosis is not common, but when it is present and life-threaten-

ing, then we must "fool with mother nature" to help its reversal toward normal. The intravenous use of hydrochloric acid hastens this reversal.

When one reflects that the body is replete with hydrochloric acid in the stomach and with hydrogen ions and chloride ions in the blood, the simple intravenous use of this dilute acid becomes less frightening.

Doctors Johnson and Cloyd are offering the clinician a new dimension in the treatment of this potentially serious condition. I wish, however, they had been able to include a case report of their own experience.

A brief review of the bibliography included by Doctor Johnson et al, reveals most of the clinical experience comes from our brethren in the United Kingdom. Perhaps it is time we borrow a page from their book.

Below is detailed information for the preparation of intravenous hydrochloric acid solution. With this information now available we need certain guidelines for its use. May I suggest the following:

(1) Severe metabolic alkalosis with the patient's arterial blood pH above 7.55.

(2) Admission to an Intensive Care Unit or similar maximal care and observation area.

(3) Administration of the hydrochloric acid via a central venous catheter into the superior vena cava. The amount of HCl to be administered may be estimated by considering the mEq bicarbonate excess to be neutralized.

(4) Frequent and accurate determination of arterial blood pH and $p\text{CO}_2$.

In this article Doctor Johnson has offered the bedside clinician another modality of therapy for a serious and life-threatening metabolic derangement in those patients whose normal body mechanisms are compromised or absent. His experience is not so much a mandate for its use as it is a plea for an awareness of its existence. This plea should not go unheeded.

Preparation of Intravenous Hydrochloric Acid

The following procedure should be used when preparing hydrochloric acid for intravenous use:

(1) Add 8.4 ml of Analytical Reagent Grade (available in hospital laboratory) concentrated

hydrochloric acid to 8.4 ml of sterile water for injection. This may be done in a beaker or a glass or plastic syringe. Remember always to add the *acid to water*, and *not* the reverse. This forms a 6 M solution.

(2) Pass the solution through a sterile 0.22 micron membrane filter, adding the solution to a 1000 ml bag or bottle of sterile water. Standard disposable needles may be used. However, avoid contact between the solution and the metal hub of the needle.

(3) The resultant solution is 1000 ml of 0.1 N hydrochloric acid.

The same procedure may be used for higher strength solutions, making the appropriate adjustments for quantities of reagents used.

Baxter-Travenol has stated that solutions up to 0.2 N in HCl are compatible with their plastic administration sets. No recommendations regarding stability of the solution are available. Therefore, it is advisable to give the solution a 24-hour dating.

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Final classification of the less than effective indications requires further investigation.

CONTRAINDICATIONS. Administration of Antivert (meclizine HCl) during pregnancy or to women who may become pregnant is contraindicated in view of the teratogenic effect of the drug in rats.

The administration of meclizine to pregnant rats during the 12-15 day of gestation has produced cleft palate in the offspring. Limited studies using doses of over 100 mg./kg./day in rabbits and 10 mg./kg./day in pigs and monkeys did not show cleft palate. Congeners of meclizine have caused cleft palate in species other than the rat.

Meclizine HCl is contraindicated in individuals who have shown a previous hypersensitivity to it.

WARNINGS. Since drowsiness may, on occasion, occur with use of this drug, patients should be warned of this possibility and cautioned against driving a car or operating dangerous machinery.

Usage in Children: Clinical studies establishing safety and effectiveness in children have not been done; therefore, usage is not recommended in the pediatric age group.

Usage in Pregnancy: See "Contraindications."

ADVERSE REACTIONS. Drowsiness, dry mouth and, on rare occasions, blurred vision have been reported.

More detailed professional information available on request.

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LUFYLLIN[®]-400 (dyphylline) Tablets
Following is a Brief Summary:

Indications: For relief of acute bronchial asthma and for reversible bronchospasm associated with chronic bronchitis and emphysema.

Contraindications: In individuals who have shown hypersensitivity to any of its components.

Dyphylline should not be administered concurrently with other xanthine preparations.

Precautions: Use with caution in patients with severe cardiac disease, hypertension, hyperthyroidism, or acute myocardial injury. Particular caution in dose administration must be exercised in patients with peptic ulcers, since the condition may be exacerbated. Chronic oral administration in high doses (500 to 1,000 mg) is usually associated with gastrointestinal irritation.

Great caution should be used in giving dyphylline to patients in congestive heart failure. Such patients have shown markedly prolonged blood level curves which have persisted for long periods following discontinuation of the drug.

Adverse Reactions: Note: Included in this listing which follows are a few adverse reactions which may not have been reported with this specific drug. However, pharmacological similarities among the xanthine drugs require that each of the reactions be considered when dyphylline is administered.

The most consistent adverse reactions are:

1. Gastrointestinal irritation, nausea, vomiting, and epigastric pain, generally preceded by headache, hematemesis, diarrhea.

2. Central nervous system stimulation: irritability, restlessness, insomnia, reflex hyperexcitability, muscle twitching, clonic and tonic generalized convulsions, agitation.

3. Cardiovascular: palpitation, tachycardia, extrasystoles, flushing, marked hypotension, and circulatory failure.

4. Respiratory: tachypnea, respiratory arrest.

5. Renal: albuminuria, increased excretion of renal tubule and red blood cells.

6. Others: fever, dehydration.

Dosage and Administration: Adults—Usual Dose—15 mg/kg every 6 hours, up to four times a day. The dosage should be individualized by titration to the condition and response of the patient, with therapeutic blood levels considered to be between 10 mcg/ml and 20 mcg/ml. Levels above 20 mcg/ml may produce toxic effects.

How Supplied:

LUFYLLIN[®] Tablets—containing 200 mg dyphylline. NDC 0019-R521-92, bottles of 100; NDC 0019-R521-97, bottles of 1000.

LUFYLLIN[®]-400 Tablets—containing 400 mg dyphylline. NDC 0019-0731-92, bottles of 100.

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From The Editor's Notebook

Medicine and Business

The Courier-Journal for Sunday, February 6, 1977, carried excerpts from a speech by Stanley C. Gault, a vice-president of General Electric Co., to the Louisville Chamber of Commerce. The headline theme was "What's ahead for America in its third century?" Gault in recognizing some of our current problems said, ". . . I am convinced that the business community can make a profound contribution toward putting America back on course."

There followed four paragraphs that I thought were most interesting if you will read them first as I did on the second reading: where the word **business** is used try substituting **medicine** and see if it doesn't make a lot of sense.

"The first, and perhaps the most difficult, step that *business* must take is to enhance its own image—to bridge the credibility gap with consumers and legislators, and develop and maintain a constituency of hard-core supporters who will come to its aid in times of trouble and speak up for it in the national debate on public policy.

"How do we go about developing a *business* constituency? In my judgment, we have to start by putting our own house in order. Where there are problems we must resolve them without waiting to be told to by the critics or ordered to by the government. As businessmen, we will have to demonstrate, through performance, that we respect legitimate public expectations and are trying our best to serve the public interest. And we will have to accept, with some humility, the fact that none of us is without his shortcomings.

"Century III businessmen will also need to achieve much greater political sophistication and become more deeply involved in the government decision-making process. Business must make its expertise and experience available to those who sponsor, enact and administer new legislation or regulations to help ensure that new laws and rules are designed to truly benefit the public without undermining the business system.

"An integral part of this more productive relationship between business and government is the

need for businessmen to raise issues, answer charges and relate their programs to the common interest of all publics."

And I feel sure the KEMPAC leaders will revel and rejoice in the last two paragraphs. JSL

How Much Has Kentucky Changed?

I have enjoyed reading "Letters of E. B. White," collected and edited by Dorothy Lobrano Guth (Harper and Row 1976, 686 pages, \$15). In one of his letters to his mother dated May 8, 1922, there are some humorous bits about Kentucky: ". . . and here we are, three miles west of Cave City and all primed to see one of the seven wonders of the world. This part of Kentucky is full of caves—no home is complete without one." Writing of Eastern Kentucky he noted it "has queer stubby hills which rise quite abruptly from the Ohio River" and ". . . where the populace drawls and sits leisurely on front porches, we have the muddy Ohio, creeping indolently down a smiling valley, blending its pretty brown with the greens of the field, and floating little old flat boats sculled by calm country men." And from Lexington and the Bluegrass area he wrote, "The grass is a luxurious bluish-green, and the heavy oaks and beeches give the landscape a park-like effect." He noted, "The stables are more elaborate and beautiful than the dwellings" and "The races were on in Lexington. We soon discovered that. The lobby of the hotel was full of horsey men, in stripes and checks, who looked as though they knew every filly of any account back to 1880. And full of racey women—wives of the horsey men. And full of small colored bellhops in purple uniforms and enormous gold buttons going about carrying strawberry cocktails to the guests." And in Louisville at Derby time: "It's Kentucky's big day. Everyone gets all dolled up and excited in the morning, and drunk at night."

Editor Guth tells us about White and his betting losses at Churchill Downs which prompted him to write a sonnet to the winning horse that he sold to the Louisville Herald because the Courier turned him down. JSL

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Rectal Cream with Hydrocortisone Acetate

CAUTION: Federal law prohibits dispensing without prescription.

Description: Each Anusol-HC Suppository contains Hydrocortisone Acetate, 10.0 mg; Bismuth Subgallate, 2.25%; Bismuth Resorcin Compound, 1.75%; Benzyl Benzoate, 1.2%; Peruvian Balsam, 1.8%; Zinc Oxide, 11.0%; also contains the following inactive ingredients: bismuth subiodide, calcium phosphate, and coloring in a bland hydrogenated vegetable oil base.

Each gram of Anusol-HC Cream contains Hydrocortisone Acetate, 5.0 mg; Bismuth Subgallate, 22.5 mg; Bismuth Resorcin Compound, 17.5 mg; Benzyl Benzoate, 12.0 mg; Peruvian Balsam, 18.0 mg; Zinc Oxide, 110.0 mg; also contains the following inactive ingredients: propylene glycol, bismuth subiodide, propylparaben, methylparaben, polysorbate 60, sorbitan monostearate in a water-miscible base of mineral oil and glyceryl monostearate. Nonstaining.

Indications: Anusol-HC is adjunctive therapy for the symptomatic relief of pain and discomfort in: external and internal hemorrhoids, proctitis, papillitis, cryptitis, anal fissures, incomplete fistulas, and relief of local pain following anorectal surgery.

Anusol-HC is especially indicated when inflammation is present.

Contraindications: History of sensitivity to any component. Topical corticosteroids should not be employed in tuberculous, fungal and most viral lesions of the skin (including herpes, varicella and varicella).

Warning: The safe use of topical steroids during pregnancy has not been fully established.

Therefore, during pregnancy they should not be used unnecessarily on extensive areas, in large amounts or for prolonged periods of time.

Precautions: Symptomatic relief should not delay definitive diagnoses or treatment. When

there is bacterial skin infection, topical corticosteroids should be used only with appropriate concomitant antimicrobial therapy. Prolonged or excessive use of corticosteroids might produce systemic effects.

Dosage and Administration: Anusol-HC Suppositories: Remove foil wrapper and insert suppository into the anus. One suppository in the morning and at bedtime, for 3 to 6 days or until inflammation subsides. Then maintain patient comfort with regular Anusol.

Anusol-HC Cream: Adults—After gentle bathing and drying of the area, remove tube cap and apply to the exterior surface and gently rub in. For internal use, attach the plastic applicator and insert into the anus by applying gentle continuous pressure. Then squeeze the tube to deliver medication. Cream should be applied 3 or 4 times a day for 3 to 6 days until inflammation subsides.

Supplied: Suppositories—boxes of 12 (N 0047-0089-12); in silver foil strips with Anusol-HC printed in black.

Cream—one-ounce tube (N 0047-0090-01) with plastic applicator; detachable label.

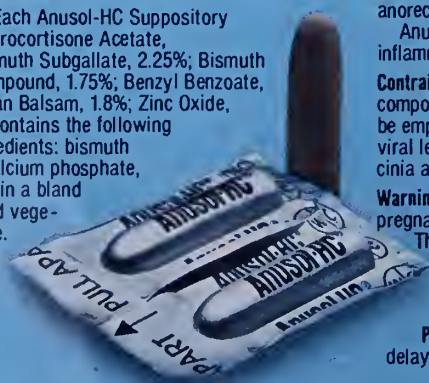
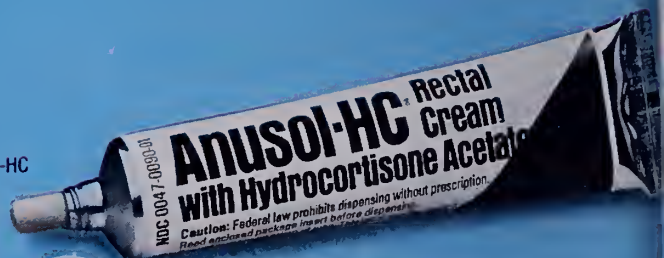
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MATERNAL MORTALITY



14-74. This 14-year-old, single, Gravida 1, Para 0, was seen initially on September 3, 1974. Her EDC was October 22, 1974. She returned one week later and was admitted to the hospital for control of excessive weight gain and edema.

On admission she weighed 226 lbs; blood pressure 140/100; temperature normal; her feet and ankles were edematous. She was treated with 50% MgSO₄ 10cc intramuscularly in each hip. On September 12, 1974, after approximately five hours of what was interpreted as good labor; she made little progress. X-ray pelvimetry was obtained revealing normal measurements; however, there was marked molding of the fetal vertex which remained high.

The examiner had difficulty defining the presenting part and felt that the patient should be delivered by section. Under general anesthesia with Pentothal, a low cervical section was performed with delivery of an 8 lb 1 oz female at 3:20 p.m. on September 12, 1974. The placenta was removed. The fetal head was difficult to deliver and there was extension of the incision involving the right uterine artery. This was sutured with #1 chromic figure 8 suture because of moderate bleeding. The field was dry and the peritoneum was closed and after placing three retention sutures, the fascia and skin were closed in a routine manner.

After six hours bleeding per vagina was persistent. The patient was prepped and draped in the usual manner. The old sutures from the previous surgical procedure were cut and the abdomen was entered through the same incision. There appeared to be a small hematoma on the right edge of the uterine incision and there was oozing from that area; however, on exploration of the lower uterine segment and vagina it was apparent that they were full of blood and blood clots. An attempt to control bleeding was made by placing some #1 chromic figure 8 sutures in the right angle of the uterine incision. Several sutures were placed and tied; however, the patient continued to ooze from that area. A bilateral uterine artery ligation was then done using #1 chromic

catgut sutures. However, the patient continued to have bleeding from the angle of the right portion of the uterine incision. A hypogastric artery ligation was contemplated; however, because of the depth of the pelvis and the patient's obesity, this was not done. It was elected to do a supra-cervical hysterectomy. During this procedure bleeding was profuse from all areas: the bladder flap which had been reflected inferiorly, the right angle of the uterine incision, and also from the areas which were clamped and ligated during the hysterectomy. During the hysterectomy it was noted that there was very little blood clotting present. The patient was receiving blood continuously during the procedure.

The uterus was amputated just inferior to the previous Cesarean section incision. The remaining cervical tissue was then closed with #1 chromic figure 8 mattress sutures. Subsequent to the hysterectomy, bleeding appeared to be well controlled. The oozing seemed to stop and the patient's condition stabilized. The pelvic area was then reperitonealized using a #00 chromic suture. The patient had been on a cardiac monitor during the procedure and as the anterior peritoneum was starting to be closed, the patient had an episode of fibrillation followed by cardiac arrest. Massage of the heart through the abdomen and thoracic wall by compression was begun and there were occasional cardiac systoles palpable. The patient was given intracardiac Adrenalin, Ephedrine, Isoprel and was shocked with the defibrillator twice with no response. The patient was pronounced dead at 11:10 p.m.

Final Diagnosis: Postpartum hemorrhage probably due to hemorrhage from the right uterine artery.

Comment

The Committee on Maternal Mortality classified this as a direct obstetrical death with questionable preventable factors. The preventable factor in her death may have been the lack of realization that a coagulation defect was present

(Continued on Page 147)



RECENT CHANGES

federal register

Providing Drug Information to Physicians

Informational Bulletin #433-76

National Health Insurance

special report
Malpractice insurance:

drug bulletin

Health care doesn't need more red tape

Drug firms challenge MAC rules

Drug Substitution

The Canadian Department of Health Progress
RESEARCH

Mailgram 1

THERE ARE A LOT OF PEOPLE GETTING BETWEEN YOU AND YOUR PATIENT.

Medicine today is in the spotlight, subjected to all kinds of scrutiny. Your control over patient therapy is being monitored, judged and occasionally abrogated, sometimes by unknown third parties.

The worry is that in the wake of this focus, the relationship between you and your patient will be weakened, without offsetting benefits. Consider three examples:

Drug substitution In most states, pharmacy laws, regulations or professional custom stipulate that your non-generic prescriptions be filled with the precise products you prescribe. But in the last five years, a dozen or more State laws have been changed, permitting the pharmacist in most cases to select a product of the same generic drug to fill any prescription.

Ironically, this dilution of physician control has taken place against a background of growing evidence that purportedly equivalent drug products may be inequivalent, since neither present drug standards nor their enforcement are optimal. In fact, the FDA itself says it has not enforced the same standards for hundreds of "follow-on" products that it had applied to the original NDA approvals. Thus physician control over patient therapy is being eroded with a risk that patients may be exposed to drugs of uncertain quality.

The major advertised claim for substitution is reduced prescription prices for consumers. Yet no documentation of any significant savings has been produced.

MAC Maximum Allowable Cost, MAC for short, is a Federal regulation designed to cut the Government's drug bill by setting price ceilings for drugs dispensed to Medicare and Medicaid patients. Unless the prescriber certifies on the prescription that a particular product is medically necessary, the Government intends to pay only for the cost of the lowest-priced, purportedly-equivalent,

generally-available product. The effect of the program may be that elderly and indigent patients will be restricted to products which someone in Washington believes are priced right. Practicing doctors will have little to say about administration of the program, since Government will have absolute authority to make its choices stick.

The drug lag The future of drug and device research depends upon a scientific and regulatory environment that encourages therapeutic innovations. The American pharmaceutical industry annually is spending more than \$1 billion of its own funds and evaluating more than 1,200 investigational compounds in clinical research. Disease targets include cancer, atherosclerosis, viruses and central nervous system disorders, among others. But there is a major barrier to the flow of new drugs to your patients: The cost of the research is more than ten times what it was, per product, in 1962; and whereas governmental clearance of new drug applications took six months then, it commonly consumes two years now.

The FDA needs adequate time, of course, to consider data. But it is equally clear that the present approval process contributes to needless delay of needed therapy. That's why the increased efficiency of the drug approval process is vital to all our futures.

If these issues concern you, we suggest that you make your voice heard—among your colleagues and your representatives in State legislatures and in Washington.

It could make a difference in your practice tomorrow.



Pharmaceutical Manufacturers Association
1155 Fifteenth Street, N.W., Washington, D.C. 20005



ASSOCIATIONAL NEWS



UCR and Unity Reigned as the Theme Of the Special Session of the House of Delegates

UCR and unity was the theme of the special House of Delegates meeting held Thursday, February 10, in Louisville. The purpose of the meeting, called by KMA President, Paul J. Parks, M.D., at the unanimous recommendation of the KMA Board of Trustees, was to consider and, if indicated, act on the policy set by the House of Delegates in September calling for KMA to "ask the Medicare Intermediary in the Commonwealth to seek a single state classification for physician reimbursement."

Following the meeting in September, the Board of Trustees contacted the Metropolitan Life Insurance Company, which is the Intermediary for Medicare Part B in Kentucky, to advise them of KMA's new policy, thus, implementing the Resolution as passed by the House. Also, in implementing the recommendations of the Committee on Medicare and Other Governmental Medical Services, Medicare officials were asked to appear before the Board to discuss projected single state area payments in comparison with charge levels existing at the time the report was written.

In his remarks before the House, President Parks explained in detail new information the Board of Trustees received from Medicare and the reasons for calling the special session.

During the special meeting, the question of reimbursement methods was debated for some four hours with Mr. Ben Sciantarelli and other Metropolitan officials being present to answer questions and to interpret Medicare regulations.

Although discussion on whether Kentucky should become a single area was vigorous by both opponents and proponents, the Delegates attending the meeting repeatedly emphasized that whatever decision was made by the House, the Delegates would go home emphasizing unity among the profession.

The question was called and the House voted 73 to 62 to overturn the single reimbursement area policy established in September. A resolution, introduced by N. H. Talley, M.D., Delegate from the Pennyrile Multi-County Medical Society, was introduced which did not call for reimbursement based on one area or three areas, but reaffirmed KMA's long-standing position of reimbursement based on current UCR fees regardless of the socio-economic or geographical area.

The resolution, which appears below, also calls for a commitment by both KMA and Medicare to utilize and abide by determinations made through peer review; a request that the carrier implement these policies immediately, and that the option of calling for a Congressional

investigation into Medicare be left open should the carrier fail to implement the resolution.

RESOLVED, KMA and this House of Delegates reaffirm our long-standing position that reimbursement be based on *current* UCR fees upgraded annually on a UCR basis, and be it further

RESOLVED, disputed fees will be subject to peer review with both parties mandated to abide by the decision with appropriate appeals open to both parties, and be it further

RESOLVED, this House of Delegates emphatically supports the concept of *no* designated area, and be it further

RESOLVED, the Association notify the carrier this is the unified position of the Association and request implementation by July, 1977, and be it further

RESOLVED, that should the carrier fail to implement the above resolution, the KMA request members of Congress to begin an open investigation of the carrier on behalf of the elderly of the Commonwealth of Kentucky and, lastly, be it

RESOLVED, if the carrier will not support our UCR concept, then let us, unified, work to replace the carrier and, as a last resort, let us individually take such further steps as we may feel to be appropriate and necessary.

Following adjournment of the meeting, Metropolitan was officially notified of the House's action and a response from them is being awaited.

Drs. Llewellyn and Overstreet To Assume New Journal Positions

John S. Llewellyn, M.D., Louisville, was appointed Editor of *The Journal of the Kentucky Medical Association* by the Board of Trustees at its February 10 meeting. Doctor Llewellyn, who previously served as Associate Editor, fills the position left vacant by the December 21 death of Henry B. Asman, M.D., who had been appointed Editor in September, 1976.

An internist, Doctor Llewellyn served as Assistant Editor of *The Journal* from 1974 to 1976 when he was appointed Associate Editor. He is a former KMA Trustee from the Fifth District and is a member of the American Society of Internal Medicine and a Fellow of the American College of Physicians.

Elected to the position of Associate Editor was A. Evan Overstreet, M.D., Louisville, who has served on

the Editorial Board since 1972. A 1955 graduate of the University of Louisville, Doctor Overstreet is also an internist and a member of the American Society of Internal Medicine.

The Board also named David L. Stewart, M.D., Louisville, as Assistant Editor. Doctor Stewart, a psychiatrist and a 1946 graduate of the University of Louisville, is a former Editor of the *Bulletin* of the Jefferson County Medical Society. He is currently Chairman of the KMA Committee on Physicians' Health.

Speakers, CME Credit Highlight Sports Seminar in March

The Sixth Annual Medical Aspects of Sports Seminar will feature top speakers during the morning sessions on March 17 and 18 at the Executive Inn in Louisville.

Presentations by Thomas Bell, LLB, Lexington, a former NFL Official, and Fran Curci, Lexington, Head Football Coach, University of Kentucky, will highlight the program which has been accredited for five hours each of Category I and II for the AMA Physicians' Recognition Award. Additional credit request has been made with the American Academy of Family Physicians.

The luncheon on March 17 will consist of food which has been recommended for athletes in training by guest speaker, Nathaniel Smith, M.D., Seattle. Doctor Smith, Professor of Pediatrics and Sports Medicine at Washington University, is author of "Food for Sports."

The program, which is designed for physicians, school administrators, teachers, coaches, trainers, and student trainers, will deal with weight control, coaching techniques to minimize injuries, team physicians' problems, women athletes, and ENT injuries.

Dr. Patrick, Mrs. Turner To Serve on Licensure Board

Governor Julian M. Carroll recently appointed two new members to fill expired terms on the Kentucky State Board of Medical Licensure. O. M. Patrick, M.D., Frankfort, and Mrs. Hugh Turner, Lexington, have been appointed to replace William P. McElwain, M.D., Frankfort, and Gerard Weigel, M.D., Somerset, on the Licensure Board. Mrs. Turner will represent consumers.

Re-appointed to the Board was Booker T. Holmes, M.D., Frankfort. Other members of the Board include, John C. Quertermous, M.D., Murray; Frank M. Gaines, Jr., M.D., Louisville; Royce E. Dawson, M.D., Owensboro; and Thomas C. McDaniel, D.O., Louisville.

Doctor McElwain, as Commissioner of the Bureau for Health Services, will now serve as an ex-officio member of the Board as do the two deans of the medical schools: Arthur H. Keeney, M.D., University of Louisville, and D. Kay Clawson, M.D., University of Kentucky.

Robert M. Blake, M.D., Maysville, has been named to a five-year term on the Board of Directors of the American Board of Family Practice. Doctor Blake, a past President of the Kentucky Academy of Family Physicians, represents the American Academy on the Board. **Nicholas J. Pisacano, M.D.**, Lexington, was re-named Secretary of the Board.

Rural Ky. Scholarship Fund Accepting Applications Now

Applications are now being accepted by the Rural Kentucky Medical Scholarship Fund for medical students entering school this fall, according to its Chairman, G. L. Simpson, M.D.

The Fund was created in 1946 as a means of providing a better distribution of physicians in rural areas of Kentucky and now has 204 physicians in practice in 87 Kentucky counties, with 28 serving in designated critical counties. Since its beginning, the Fund has loaned over 1-1/4 million dollars.

Loans are available to residents of Kentucky who have been admitted to one of the two accredited medical schools in the state. A student may borrow up to \$3,500 providing he will agree to practice in any of the over 100 rural counties of the Commonwealth of Kentucky.

The Board of Trustees of the Fund approved 44 loans for the 1976-77 school year. Twenty loans were granted to first loan applicants, which is a new record. Since 1946, 410 medical students have been assisted financially through the Fund.

Doctor Simpson, in noting the success of the program over the past 30 years, expressed particular appreciation for the interest and support of Governor Julian M. Carroll, Commissioner William P. McElwain, M.D. and the members of the Kentucky General Assembly.

Lexington Physician Appointed To AMA Ad Hoc Committee

Van R. Jenkins, II, M.D., Lexington, has been appointed to serve on the AMA Ad Hoc Committee on Services to Young Physicians.

The Committee was established by the AMA Board of Trustees to determine the needs of "young" practicing physicians and then to make specific recommendations to the Board for modifying existing Association programs and implementing new services to meet those needs.

Doctor Jenkins is hopeful that Kentucky physicians will submit constructive suggestions to the KMA Headquarters Office, 3532 Ephraim McDowell Drive, Louisville, Kentucky 40205, on specific ways organized medicine can benefit the young physician.

KMA Awards Nominations Now Being Accepted

The KMA Awards Committee is now accepting nominations for the Kentucky Medical Association Award and the Distinguished Service Award, according to Committee Chairman Fred C. Rainey, M.D., Elizabethtown.

The KMA Award is designed to honor an outstanding layman and the Distinguished Service Award honors the outstanding physician of the year. The awards are presented annually at the President's Luncheon during the KMA Annual Meeting in September.

Nominations for awards should be forwarded to the KMA Headquarters Office and marked: "Attention: Awards Committee."



Trustees' Report

SECOND TRUSTEE DISTRICT

R. J. Phillips, Jr., M.D., Owensboro

Interest in the Second Trustee District has concentrated on events leading to the special session of the House of Delegates in February. Each county society has had sufficient time to discuss the new information provided on reimbursement levels and to instruct the Delegates. Informal exchanges of information and opinions between county societies in this and other Trustee Districts have helped our Delegates prepare for meetings of the House. This suggests that resolutions presented to the House of Delegates might be better understood and more effective if the members of county societies had more time to consider them before the Delegates meet. We should consider early introduction of resolutions, so there would be time for publication in *The Journal* or distribution to county societies.

With guidance from KMA, the Daviess County Medical Society is seeking county or regional accreditation for continuing medical education. Proposed programs include scientific presentations that have long been a part of hospital staff and medical society education. People from both medical schools have been helpful in such programs, and the presentations of local society members are impressive. Accreditation functions of AMA and KMA seem likely to become of considerable value to the members.

SEVENTH TRUSTEE DISTRICT

William H. Keller, M.D., Frankfort

Prior to the untimely death of Doctor Henry Asman of Louisville, I had hoped to express to him and editorial staff of *The Journal* my appreciation for the opportunity to provide information important to KMA from the Seventh Trustee District.



I wish to emphasize my strong belief that communication is an essential ingredient in every phase of life. Communication is especially important today, with the many problems inherent in providing quality care for an increasingly complex society.

On February 3, 1977, the Franklin County Medical Society went on record as being in favor of renewing efforts to organize a multi-county medical society in the Seventh Trustee District. Franklin County physicians feel the formation of such an organization will lead to better intra-district communication; additionally, this should lead to a more effective means whereby physicians in this district may, in an organized fashion, communicate with KMA. This should also help facilitate the organization of improved postgraduate medical meetings and thus, improved physician awareness and performance. Ultimately, this should lead to higher quality patient care.

I wish to take this opportunity to assure the officers of the component medical societies that I plan to contact them regarding this matter and to continue regular communication regarding other matters of concern. I welcome suggestions from all physicians in this district, which will better enable me to fulfill my obligations as Trustee.

NINTH TRUSTEE DISTRICT

Don R. Stephens, M.D., Cynthiana

I am honored to represent my district as a Trustee to the Kentucky Medical Association. Medical life in our country is rapidly changing and it is my hope to always keep free medicine in America. Our greatest tool to keep free medicine is through KEMPAC and AMPAC. I highly encourage each physician in our district to support our political arm.

The Ninth District is located in northeastern Kentucky and is comprised of these counties: Scott, Bourbon, Harrison, Pendleton, Nicholas, Bracken, Robertson, Fleming, Mason, and Bath. There are approximately 60 physicians with relatively equal distribution throughout the District. Several fine hospitals are located within the ten-county area.

Opportunities for new physicians are present in all our counties. Robertson County, the smallest in population, has no medical doctor or pharmacy. This area offers an excellent opportunity for a new physician. Pendleton County has been fortunate to recently recruit two new doctors. We are hopeful the addition of these two physicians will aid in retaining the much needed Pendleton County Hospital.

I would encourage each physician in the Ninth District to personally contact me if they have any medical problem with which I may be of assistance.

TENTH TRUSTEE DISTRICT

James B. Holloway, Jr., M.D., Lexington

KMA's Tenth District is composed of Fayette, Jessamine, and Woodford counties. Within this area there are approximately 500 physicians (covering virtually every specialty) who serve a population of about 240,000. In Lexington, there are some 475 physicians, half of whom are associated with the University of Kentucky Medical Center, the Veterans Administration Hospital and/or Eastern State Hospital. There are three community hospitals whose beds total about 1,000. Approximately 95% of the physicians are Board certified, and 98% of the surgical procedures performed in this area are by Board certified surgeons. About half of the medical work done in Lexington is by referral from out of the District. Woodford Memorial Hospital, a well-equipped and well-staffed facility approved by the Joint Commission, is located in Versailles, a community of about 10,000.



Physicians in this tri-county area present a wide variety of philosophies ranging from the far right to the

far left. Many are quite vocal in their opinions of organized medicine — what it is and what it is not doing for the profession; however, apathy remains our biggest problem (just as it does nationwide). While it is important for me to know the wishes of the physicians in the District, it is difficult for me to communicate with each one individually.

At the present time the Fayette County Medical Society is moving to purchase the relatively new Health Department Building on Waller Avenue. This building of some 16,000 square feet will be used primarily to house the Central Kentucky Blood Center. The Medical Society offices, the Fayette County Dental Society, and other allied health organizations will also be located in this building.

A new enlarged Public Health Center is under construction on the north side of Lexington. It will house the Fayette County Health Department and its ever growing service programs to the needy of this region. The Health Department has been most responsive to the needs of its people as well as to the sensibilities, mores, and ethics of organized medicine.

Dean Kay Clawson of the University of Kentucky College of Medicine has continued the open policies toward the community so that a healthy, cooperative attitude exists between "town and gown."

The local auxiliaries are busy. The Fayette County Medical Auxiliary composed of over 200 members has long had an active scholarship fund for nurses and allied health personnel. This is financed by a superb antique show held each May and by other activities. The Woodford County Auxiliary, organized for one year, has grown from five charter members to a total of 14.

Many of the specialties have active local chapters, to include the Lexington Surgical Society, Lexington Ophthalmological Society, the Lexington Orthopaedists and Urologists. Meetings of these groups, the local society meetings, and the myriad hospital meetings keep the physicians busy and their time and activities spread thin. Nevertheless, in all three counties there remains a highly dedicated interested corps of physicians who give a great deal of time toward organized medicine.

THIRTEENTH TRUSTEE DISTRICT Howard B. McWhorter, M.D., Ashland

I welcome this opportunity to present this first report from the Thirteenth Trustee District. I want to encourage all physicians in this District to provide me with news items which they would like to have published in this quarterly report in *The KMA Journal*.

The Thirteenth District is composed of eight counties in northeastern Kentucky—Boyd, Greenup, Lawrence, Carter, Rowan, Elliott, Lewis, and Morgan. There are 122 physicians to serve a population of approximately 175,000 people, and four hospitals—King's Daughters' Hospital in Ashland, St. Clair Medical Center in Morehead, Louisa Community Hospital in Lawrence County, and Our Lady of Bellefonte Hospital in Greenup County. These hospitals are currently developing a Library Sharing Program in conjunction with the University of Kentucky Medical Center Library.

The Rowan County Medical Society has added eight new physicians to their membership since last July.

The Morehead physicians are in the process of developing a Primary Care Medical Center in neighboring Bath County, and also one in Menifee County.

King's Daughters' Hospital has recently added a Coronary Rehabilitation Program to their overall Coronary Care Program, which is one of the few in the state. A 12-month Advanced EMT Program has just been completed and a UHF telemetry transmitting system is shortly to be installed in the ambulances and hospital emergency department. This will provide Boyd County with one of the most modern EMS Systems in the state.

The Home Health Service in Boyd County has been very successful since its inception four years ago. It now provides physiotherapy, speech therapy, and occupation therapy in addition to the basic nursing services. This has been expanded to serve not only Boyd County but also Greenup, Carter, and Lawrence counties.

The Annual Meeting of the Thirteenth Trustee District is to be sponsored by the Boyd County Medical Society and will be held Tuesday, May 3, at 6:30 p.m., at the Bellefonte Country Club in Ashland. All physicians and wives in the District are invited, but reservations are required. Please contact me if you plan to attend this dinner meeting.



Did you know . . .

The AMA's Fifth Leadership Conference on January 20-23, 1977, in Chicago was attended by the KMA President, President-Elect, Chairman of the Board, Speaker of the House, and several staff members. The leadership program dealt with programs on quality of care, national health insurance, and health legislative problems expected in the upcoming year.

KMA officials were present for the first meeting of the merged Blue Cross-Blue Shield Boards of Directors on January 27, 1977. The new Board will meet every other month with a Board-appointed Executive Committee to meet the months the Board does not.

KMA staff has been touring and studying new sites for future Annual Meetings. Some of the sites under study are the new convention facilities in Lexington and Louisville.

The Annual Federation of State Medical Boards and AMA Congress on Medical Education meeting in Chicago in January was attended by KMA staff. This three-day session highlighted the advancements in continuing medical education from various states with additional discussion on problems facing this program.

On February 2, members and staff presented written and oral testimony to the State Legislative Committee on administrative regulations regarding radiologic equipment operators, Medicaid funding of home health care, and ambulatory surgical care centers.

KMA staff periodically makes presentations to local high schools on health careers, at the same time orienting them on the functions and purpose of the Association.

The Kentucky Department of Insurance in its second quarterly report on the operation of the Kentucky Patient Compensation Fund indicates that the principal of the Fund is now in excess of one million dollars, all of which is being invested in local banks. It has been estimated that 3,100 physicians and all 115 Kentucky hospitals are participating in the Fund.

The AMA Conference on the "Impaired Physician" on February 4-5 in Atlanta was attended by the Chairman of the Committee on Physicians' Health. The conference dealt with the various problems that confront the sick physician and how the medical society and its respective committees can help these individuals.

KMA leadership held an all-day meeting on March 3 to review KMA's top priority items, to include Medicare, Medicaid, continuing medical education, etc.



Committee Activity

Cancer Committee February 9

The Committee continues its interest in the activities of the Ephraim McDowell Cancer Network, the Breast Screening Program in Louisville, and the state Pap Smear Program. A discussion was held on the estrogen receptor program, which is experiencing increased activity, and experts in this field from the two universities will be invited to report on this work at the next Committee meeting. Another new area of interest is the growing interest in Laetrile for treatment of cancer patients.

It was the consensus of the Committee that more information on all of these cancer programs should be disseminated to the practicing physician so that he will know what services are available to aid him in treating his patients. The Committee also encourages greater communication and cooperation between various cancer groups in the state to assure the greatest utilization of expert knowledge, funds, and manpower in the treatment of cancer.

Joint Practice Committee February 15

At this meeting the Committee finalized plans for the Joint Practice Seminar on March 5, 1977. The Seminar, it is felt by the Committee, will be instrumental in defining new goals for the Committee. A diversified group of physicians and nurses from across the state are already registered with a better than expected enrollment foreseen for the Seminar.

The Joint Practice Committee is still in its infancy, with new challenges confronting it which stimulate productive solutions to these problems. Private practice has been experimenting with Joint Practice for sometime now. There is expected to be new expectations in this field within the hospitals. The whole role of Joint Practice is to help the medical field give the public the best available service at the most reasonable cost.



Headquarters Activity

KMA had physicians and staff members in attendance at the following activities and events:

JANUARY

- 21 State Interim Joint Committee on Business Organizations and Professions, Frankfort
- Interim Subcommittee on Professions, Frankfort
- 27 Blue Cross-Blue Shield Board Meeting, Louisville
- 28 Daviess County Medical Society Meeting on CME, Owensboro
- 27-29 Federation of State Licensure Boards and AMA Congress on Medical Education, Chicago

FEBRUARY

- 8 Presentation of Health Careers, Junior High School, Louisville
- 9 Cancer Committee, Louisville
- Executive Committee, Louisville
- 10 Board of Trustees, Louisville
- House of Delegates, Special Session, Louisville
- 15 Joint Practice Committee, Louisville
- 16 Judicial Council, Louisville
- 17 Kentucky State Board of Medical Licensure, Louisville
- 18-19 Medical Education Conference, Elizabethtown
- 21 *Journal* Editors Meeting, Louisville
- 24 Blue Cross-Blue Shield Executive Committee, Louisville
- 25 Conference Breakfast with Congressional Members, Louisville

MARCH

- 2 Board of Medical Licensure Hearing on CME, Owensboro
- 3 Health Care Costs Committee, Louisville
- 5 Joint Practice Seminar, Louisville
- 9 McDowell House Board of Managers, Danville
- 10 Red Cross Board, Louisville
- 14 *Journal* Editors Meeting, Louisville
- 17-18 Medical Aspects of Sports Seminar, Louisville
- 22 Second Trustee District Meeting, Owensboro
- 24 Budget Committee, Louisville
- Blue Cross-Blue Shield Board, Louisville
- 31 Executive Committee, Louisville



Members in the news

NEW MEMBERS

BARREN

Jim H. Whiteside, M.D., Glasgow

BOURBON

Ian Caisley, M.D., Paris

$\frac{20}{150}$

H

$\frac{20}{100}$

E A R

$\frac{20}{70}$

I N G I S

A S P R E C I O U S

A S S I G H T H A V E

Y O U H A D Y O U R H E A R I N G

T E S T E D L A T E L Y A S I M P L Y

C O M F O R T A B L E H E A R I N G

I N V E S T M E N T O F A F E W M I N U T E S


Hearing losses are among the most consistently neglected health problems. Many people with them won't even admit it to themselves, let alone others. A little encouragement may start them thinking about themselves more realistically.

That's why we're offering you the poster shown here. You can hang it on the wall or stand it on a small table. It comes with booklets called "As precious as sight" that give your patients some basic facts about auditory testing and hearing losses and how easy they are to correct in many cases.

Write to us for your free poster and booklets. They just might help you to help some patients who aren't hearing as well as they used to. Even those who ordinarily wouldn't hear of it.

Professional Relations Division, Beltone Electronics Corporation
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WHEN A HEARING
AID WILL HELP



WHEN
BURNING PAIN
COMPLICATES
ACUTE
CYSTITIS*

TURN IT OFF WITH

AZO GANTANOL[®]

Each tablet contains 0.5 Gm sulfamethoxazole and 100 mg phenazopyridine HCl

FOR THE PAIN

- Quickly relieves painful symptoms such as burning and pain associated with urgency and frequency.
- Recommended antibacterial therapy: up to 3 days with Azo Gantanol, then 11 days with Gantanol (sulfamethoxazole).

Before prescribing, please consult complete product information, a summary of which follows:

Indications: In adults, urinary tract infections complicated by pain (primarily pyelonephritis, pyelitis and cystitis) due to susceptible organisms (usually *E. coli*, *Klebsiella-Aerobacter*, *Staphylococcus aureus*, *Proteus mirabilis*, and, less frequently, *Proteus vulgaris*) in the absence of obstructive uropathy or foreign bodies.

Note: Carefully coordinate *in vitro* sulfonamide sensitivity tests with bacteriologic and clinical response; add aminobenzoic acid to follow-up culture media. The increasing frequency of resistant organisms limits the usefulness of antibacterials including sulfonamides. Measure sulfonamide blood levels as variations may occur; 20 mg/100 ml should be maximum total level.

Contraindications: Children below age 12; sulfonamide hypersensitivity; pregnancy at term and during nursing period; because Azo Gantanol contains phenazopyridine hydrochloride it is contraindicated in glomerulonephritis, severe hepatitis, uremia, and pyelonephritis of pregnancy with G.I. disturbances.

Warnings: Safety during pregnancy not established. Deaths from hypersensitivity reactions, agranulocytosis, aplastic anemia and other blood dyscrasias have been reported and early clinical signs (sore throat, fever, pallor, purpura or jaundice) may indicate serious blood disorders. Frequent CBC and urinalysis with microscopic examination are recommended during sulfonamide therapy.

Precautions: Use cautiously in patients with impaired renal or hepatic function, severe allergy, bronchial asthma; in glucose-6-phosphate dehydrogenase-deficient individuals in whom dose-related hemolysis may occur. Maintain adequate fluid intake to prevent crystalluria and stone formation.

Adverse Reactions: Blood dyscrasias (agranulocytosis, aplastic anemia, thrombocytopenia, leukopenia, hemolytic anemia, purpura,

FOR THE PATHOGENS

- Effectively controls susceptible pathogens such as *E. coli*, *Klebsiella-Aerobacter*, *Staph. aureus*, *Proteus mirabilis* and, less frequently, *Proteus vulgaris*.

*nonobstructed; due to susceptible organisms

hypoprote thrombinemia and methemoglobinemia); allergic reactions (erythema multiforme, skin eruptions, Stevens-Johnson syndrome, epidermal necrolysis, urticaria, serum sickness, pruritus, exfoliative dermatitis, anaphylactoid reactions, periorbital edema, conjunctival and scleral injection, photosensitization, arthralgia and allergic myocarditis); G.I. reactions (nausea, emesis, abdominal pains, hepatitis, diarrhea, anorexia, pancreatitis and stomatitis); CNS reactions (headache, peripheral neuritis, mental depression, convulsions, ataxia, hallucinations, tinnitus, vertigo and insomnia); miscellaneous reactions (drug fever, chills, toxic nephrosis with oliguria and anuria, periarteritis nodosa and L. E. phenomenon). Due to certain chemical similarities with some goitrogens, diuretics (acetazolamide, thiazides) and oral hypoglycemic agents, sulfonamides have caused rare instances of goiter production, diuresis and hypoglycemia. Cross-sensitivity with these agents may exist.

Dosage: Azo Gantanol is intended for the acute, painful phase of urinary tract infections. Usual adult dosage: 2 Gm (4 tabs) initially, then 1 Gm (2 tabs) B.I.D. for up to 3 days. If pain persists, causes other than infection should be sought. After relief of pain has been obtained, continued treatment with Gantanol (sulfamethoxazole) may be considered.

NOTE: Patients should be told that the orange-red dye (phenazopyridine HCl) will color the urine.

Supplied: Tablets, red, film-coated, each containing 0.5 Gm sulfamethoxazole and 100 mg phenazopyridine HCl—bottles of 100 and 500.

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Each capsule contains 50 mg. of Dyrenium[®] (triamterene, SK&F Co.) and 25 mg. of hydrochlorothiazide.

**LOWERS
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**CONSERVES
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Before prescribing, see complete prescribing information in SK&F Co. literature or PDR. A brief summary follows:

WARNING

This fixed combination drug is not indicated for initial therapy of edema or hypertension. Edema or hypertension requires therapy titrated to the individual patient. If the fixed combination represents the dosage so determined, its use may be more convenient in patient management. The treatment of hypertension and edema is not static, but must be reevaluated as conditions in each patient warrant.

Indications: When the fixed combination represents the dosage determined by titration: Adjunctive therapy in edema associated with congestive heart failure, hepatic cirrhosis, the nephrotic syndrome. Corticosteroid and estrogen-induced edema, idiopathic edema; hypertension, when the potassium-sparing action of its 'Dyrenium' component is warranted.

Contraindications: Further use in progressive renal or hepatic dysfunction; hyperkalemia. Pre-existing elevated serum potassium. Hypersensitivity to either component or other sulfonamide-derived drugs. Routine use of diuretics in otherwise healthy pregnancy.

Warnings: Do not use potassium supplements, dietary or otherwise, unless hypokalemia develops or dietary intake of potassium is markedly impaired. If supplementary potassium is needed, potassium tablets should not be used. Hyperkalemia can occur, and has been associated with

cardiac irregularities. It is more likely in severely ill patients with urine volume less than one liter/day, the elderly or diabetics, with suspected or confirmed renal insufficiency. Periodic determinations of serum K^+ should be made. If hyperkalemia develops, substitute a thiazide alone, restrict K^+ intake. The presence of a widened QRS complex or arrhythmia in association with hyperkalemia requires prompt additional therapy. Thiazides are reported to cross the placental barrier and appear in breast milk; fetal or neonatal hyperbilirubinemia, thrombocytopenia, altered carbohydrate metabolism and other adverse reactions that have occurred in the adult may result. When used in pregnancy or in women who might bear children, weigh potential benefits against possible hazards to fetus. Adequate information on use in children is not available.

Precautions: Do periodic serum electrolyte determinations (particularly important in patients vomiting excessively or receiving parenteral fluids). Periodic BUN and serum creatinine determinations should be made, especially in the elderly, diabetics, or those with suspected or confirmed renal insufficiency. Watch for signs of impending coma in severe liver disease. If spiro-lactone is used concomitantly, determine serum K^+ frequently; both can cause K^+ retention and elevated serum K^+ . Two deaths have been reported with such concomitant therapy (in one, recommended dosage was exceeded, in the other serum electrolytes were not properly monitored). Observe regularly for possible blood dyscrasias, liver damage, other idiosyncratic reactions. Blood dyscrasias have been reported in patients receiving Dyrenium[®] (triamterene, SK&F Co.), and

leukopenia, thrombocytopenia, agranulocytosis, and aplastic anemia have been reported with thiazides. Do periodic blood studies in cirrhotics to check for nondrug-related variations in blood pictures, and in patients with folic acid depletion, since 'Dyrenium' may contribute to appearance of megaloblastosis. Antihypertensive effect may be enhanced in post-sympathectomy patients. Use cautiously in surgical patients. The following may occur: transient elevated BUN or creatinine or both, hyperglycemia and glycosuria (diabetic insulin requirements may be altered), hyperuricemia and gout, digitalis intoxication (in hypokalemia), decreasing alkali reserve with possible metabolic acidosis. 'Dyazide' interferes with fluorescent measurement of quinidine.

Adverse Reactions: Muscle cramps, weakness, dizziness, headache, dry mouth; anaphylaxis, rash, urticaria, photosensitivity, purpura, other dermatological conditions; nausea and vomiting, diarrhea, constipation, other gastrointestinal disturbances. Necrotizing vasculitis, paresthesias, icterus, pancreatitis, xanthopsia and, rarely, allergic pneumonitis have occurred with thiazides alone.

Supplied: Bottles of 100 and 1000 capsules; Single Unit Packages of 100 (intended for institutional use only).

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codeine phosphate, 32 mg (gr ½),
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and caffeine, 32 mg.



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c̄ CODEINE
#3**

Each tablet contains:
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(Warning: May be habit-forming);
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IN MEMORIAM

ROBERT A. CLARY, M.D.

Louisville

1924-1977

Robert A. Clary, M.D., a Louisville psychiatrist, died on January 20 at the age of 52. A 1953 graduate of the University of Louisville School of Medicine, Doctor Clary was president of the medical staff at Our Lady of Peace Hospital. He had been a member of the Jefferson County Medical Society, the Kentucky Medical Association, and the American Medical Association.

SILAS H. STARR, M.D.

Louisville

1901-1977

Silas H. Starr, M.D., 75, died on January 31 in Louisville. An obstetrician-gynecologist, Doctor Starr was a 1924 graduate of the University of Louisville School of Medicine and in 1926 was the first resident in obstetrics at Louisville General Hospital.

Doctor Starr belonged to the American Association of Obstetricians and Gynecologists, the American College of Obstetricians and Gynecologists, and was past president of the Norton Infirmary and Kentucky Baptist Hospital staffs. He was a member of the Jefferson County Medical Society, as well as the Kentucky and American medical associations.

Maternal Mortality

(Continued from Page 135)

when it was noted that she was oozing from all surfaces. Perhaps the administration of fresh frozen plasma would have been beneficial to correct this clotting defect.

This patient would certainly be classified as a high risk patient, due to her age and her obesity. The obesity makes it very difficult technically for an operation. This case again emphasizes what has been said so often in these comments, that death from hemorrhage is still a major cause of maternal death and it takes at least four to five hours of bleeding for a young woman to die.



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Hyland Center offers a 21-day, physician based, treatment program, available to men, women and the adolescent, designed to help break the patient's addictive behavior patterns and to reinforce a new lifestyle free from alcohol dependency.

Daily activities include group and individual counseling, family counseling, workshops, lectures and recreational activities, all provided in an attractive, non-institutional atmosphere under the direction of the patient's physicians.

Each patient must voluntarily seek admission and be referred to the Center. After taking part in the three-week inpatient program, patients will be encouraged to continue their treatment through outpatient and aftercare services.

The complete range of diagnostic services and treatment facilities of St. Anthony's Medical Center will be available if medical problems should arise.

For further information, contact:

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(314) 842-5600

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George P. Casey
Executive Vice President
Joseph B. Kendis, M.D.
Chief, Chemical Dependencies



It's So True. . . .

For Christmas my 7-year-old daughter embroidered a tapestry with a little girl on it. It read, "Please be patient . . . God isn't finished with me yet. . ."

While trying to think of what to write this month in my ad, I read and thought that this not only applies to the young, but to us all.

Bud Ernst

KENTUCKY MEDICAL DISABILITY PROGRAM

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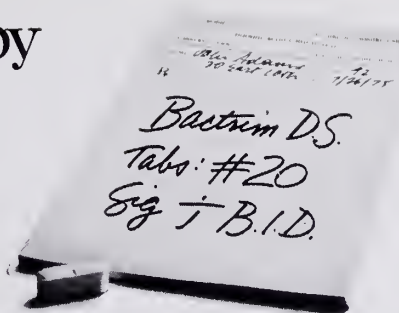
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10-day Bactrim therapy outperforms 10-day ampicillin therapy.



In a multicenter, double-blind study of patients with chronic or frequently recurrent urinary tract infection, Bactrim 10-day therapy outperformed ampicillin 10-day therapy by 27.2%, when comparing patients who maintained clear cultures for eight weeks. The criterion for "clear culture" was 1000 or fewer organisms/ml of urine.

While adverse reactions noted in this study were mild (e.g., vomiting, nausea, rash), more serious reactions can occur with these drugs. See manufacturer's product information for complete listing. Maintain adequate fluid intake; perform frequent CBC's and urinalyses with microscopic examination.

Note: Bactrim tablets were used in these clinical trials. Bioequivalency studies show one Bactrim DS double strength tablet is equivalent to two Bactrim tablets.

For chronic or frequently recurrent cystitis and pyelonephritis due to susceptible organisms.

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Chronic urinary tract infections evidenced by persistent bacteriuria (symptomatic or asymptomatic), frequently recurrent infections (relapse or reinfection), or infections associated with urinary tract complications, such as obstruction. Primarily for cystitis, pyelonephritis or pyelitis due to susceptible strains of *E. coli*, *Klebsiella-Enterobacter*, *Proteus mirabilis*, *Proteus vulgaris* and *Proteus morganii*.

NOTE: The increasing frequency of resistant organisms limits the usefulness of antibacterials, especially in these urinary tract infections. The recommended quantitative disc susceptibility method (*Federal Register*, 37:20527-20529, 1972) may be used to estimate bacterial susceptibility to Bactrim. A laboratory report of "Susceptible to trimethoprim-sulfamethoxazole" indicates an infection likely to respond to Bactrim therapy. If infection is confined to the urine, "Intermediate susceptibility" also indicates a likely response. "Resistant" indicates that response is unlikely.

Contraindications: Hypersensitivity to trimethoprim or sulfonamides; pregnancy; nursing mothers.

Warnings: Deaths from hypersensitivity reactions, agranulocytosis, aplastic anemia and other blood dyscrasias have been associated with sulfonamides. Experience with trimethoprim is much more limited but occasional interference with hematopoiesis has been reported as well as an increased incidence of thrombopenia with purpura in elderly patients on certain diuretics, primarily thiazides. Sore throat, fever, pallor, purpura or jaundice may be early signs of serious blood disorders. Frequent CBC's are recommended; therapy should be discontinued if a significantly reduced count of any formed blood element is noted. **Data are insufficient to recommend use in infants and children under 12.**

Precautions: Use cautiously in patients with impaired renal or hepatic function, possible folate deficiency, severe allergy or bronchial asthma. In patients with glucose-6-phosphate dehydrogenase deficiency, hemolysis, frequently dose-related, may occur. During therapy, maintain adequate fluid intake and perform frequent urinalyses, with careful microscopic examination, and renal function tests, particularly where there is impaired renal function.

Adverse Reactions: All major reactions to sulfonamides and trimethoprim are included, even if not reported with Bactrim. *Blood dyscrasias:* Agranulocytosis, aplastic anemia, megaloblastic anemia, thrombopenia, leukopenia, hemolytic anemia, purpura, hypoproliferative thrombinemia and methemoglobinemia. *Allergic reactions:* Erythema

Bactrim™ DS

(160 mg trimethoprim and 800 mg sulfamethoxazole)

Double Strength tablets

Just 1 tablet B.I.D.

Bactrim™

(80 mg trimethoprim and 400 mg sulfamethoxazole)

2 tablets B.I.D.

multiforme, Stevens-Johnson syndrome, generalized skin eruptions, epidermal necrolysis, urticaria, serum sickness, pruritus, exfoliative dermatitis, anaphylactoid reactions, periorbital edema, conjunctival and scleral injection, photosensitization, arthralgia and allergic myocarditis. *Gastrointestinal reactions:* Glossitis, stomatitis, nausea, emesis, abdominal pains, hepatitis, diarrhea and pancreatitis. *CNS reactions:* Headache, peripheral neuritis, mental depression, convulsions, ataxia, hallucinations, tinnitus, vertigo, insomnia, apathy, fatigue, muscle weakness and nervousness. *Miscellaneous reactions:* Drug fever, chills, toxic nephrosis with oliguria and anuria, periarteritis nodosa and L. E. phenomenon. Due to certain chemical similarities to some goitrogens, diuretics (acetazolamide, thiazides) and oral hypoglycemic agents, sulfonamides have caused rare instances of goiter production, diuresis and hypoglycemia in patients; cross-sensitivity with these agents may exist. In rats, long-term therapy with sulfonamides has produced thyroid malignancies.

Dosage: Not recommended for children under 12. Usual adult dosage: 1 DS tablet (double strength), 2 tablets (single strength) or 4 teasp. (20 ml) b.i.d. for 10-14 days.

For patients with renal impairment:

| Creatinine Clearance (ml/min) | Recommended Dosage Regimen |
|-------------------------------|---|
| Above 30 | Usual standard regimen |
| 15-30 | 1 DS tablet (double strength), 2 tablets (single strength) or 4 teasp. (20 ml) every 24 hours |
| Below 15 | Use not recommended |

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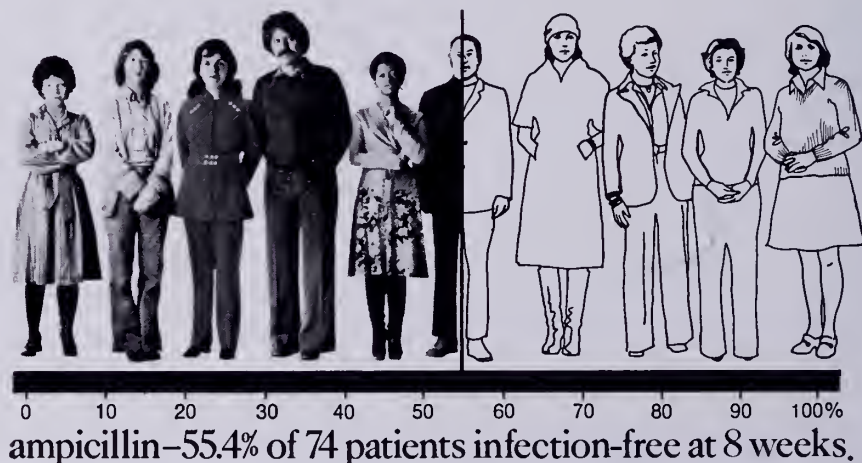
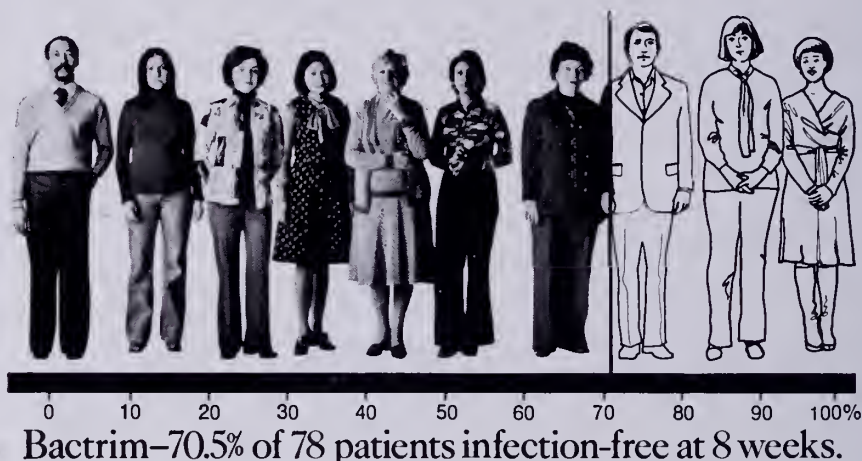
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April 1977
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MESSAGE FROM THE PRESIDENT



THE House of Delegates voted once again to confirm the concept of UCR (usual, customary and reasonable) as the basis for Medicare payment of physicians.

The Kentucky Medical Association is composed of physicians who voluntarily choose to join, to share their individual concerns and efforts to improve and deliver health care to their patients who are also individuals. Our fundamental relationship to the people is a doctor-patient relationship.

The physician's obligation, assumed by his own oath, is to care for his patient's health to the best of his ability regardless of ability to pay. The patient exercises his rights to choose his own physician and to accept or reject the treatment offered.

With regards to payment for his services, the House of Delegates of KMA feels the physician should be paid his individual customary charge and assumes every physician will be reasonable in that charge. The House rejects the concepts of areas and of fee fixing by government. The KMA once again stands up for the individual rights and freedom and equality of all physicians regardless of location.

Let us hope we will continue to fight against government control and for our individual rights. Economic freedom is basic to individual freedom.

JOHN P. STEWART, M.D.
KMA PRESIDENT-ELECT

This is the second in a series of articles written at the request of KMA President, Paul J. Parks, M.D.



POSTGRADUATE OPPORTUNITIES



IN KENTUCKY

APRIL

- 15 Fifth Annual C. Dwight Townes Memorial Seminar,** Health Sciences Center, Louisville
- 15-16 "Endocrinology for the Practicing Physician,"* Fee: \$75. University of Kentucky Medical Center, Lexington
- 20 "New Concepts in Infertility,"** PCP Series, Health Sciences Center, Louisville
- 21-22 "The Menopausal Syndrome: Physiology and Therapy,"* Fee: \$100. Hyatt Regency, Lexington
- 26 "Chemotherapy for Gynecologic Malignancies," 7 p.m., sponsored by the Letcher County Medical Society, Whitesburg Appalachian Regional Hospital, Whitesburg
- 26-27 "Establishing Yourself in Medical Practice" Workshop for Senior Residents, Ramada Inn-Bluegrass Convention Center, Louisville
- 27 "Metabolic Bone Disease,"** Louisville Area CME Consortium, Health Sciences Center, Louisville
- 28-May 2 Modern Management of Major Problems in Surgery, University of Louisville Department of Surgery, Galt House, Louisville
- 28-30 Third Postgraduate Course in High Risk Pregnancy,** Health Sciences Center, Louisville

MAY

- 11-14 Annual Meeting, Kentucky Academy of Family Physicians, Ramada Inn/Bluegrass Convention Center, Louisville
- 13-15 Kentucky Society, American Association of Medical Assistants, Ken-Bar Inn, Gilbertsville
- 17 "Financial Control of Your Medical Practice" Workshop, Hyatt Regency, Lexington
- 18 "Financial Control of Your Medical Practice" Workshop, Ramada Inn-Hurstbourne Lane, Louisville
- 18-20 Symposium on Radiology of the Non-Traumatized Emergency Room Patient,* Fee: \$250. Hyatt Regency, Lexington
- 19 "Financial Control of Your Medical Practice" Workshop, Kenlake Resort Park, Hardin

*For further information, contact: Frank R. Lemon, M.D., Associate Dean for Continuing Education, University of Kentucky College of Medicine, Lexington 40506

**For further information contact: Gerald D. Swini, Executive Director, Office of Continuing Education, University of Louisville School of Medicine, Louisville 40202

- 19-21 Spring meeting, Kentucky Surgical Society, Lake Barkley State Park
- 20-21 Spring Meeting, Kentucky Occupational Medical Association, Executive Inn West, Louisville
- 25-26 KMA Emergency Medical Care Seminar, Ramada Inn/Bluegrass Convention Center, Louisville
- 26-27 "Pediatric Chest Problems,"* Fee: To be determined. Hyatt Regency, Lexington

JUNE

- 1 "Hypertension—Workup and Management,"** Louisville Area CME Consortium, Health Sciences Center, Louisville
- 1-3 International Conference on the Clinical Uses of Carcinoembryonic Antigen (CEA)*, Hyatt Regency Lexington. Fee: \$75.
- 9-11 Wangenstein Surgical Symposium,* Fee: \$200. University of Kentucky Medical Center, Lexington

LOOK AHEAD

June 18-23, AMA Annual Convention, San Francisco

September 27-29, KMA Annual Meeting, Louisville

Conferences For Medical Professionals

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Blue Shield of Kentucky 1976 Report

| Membership | (as of December 31) | 1976 | 1975 |
|------------------------------------|----------------------------|-------------|-------------|
| Total Membership..... | | 1,366,752 | 1,367,699 |
| Net Enrollment Loss (Members)..... | | (947) | 29,312 |
| Percent of Net Decrease..... | | (.07%) | 2.19% |
| New Employee Groups Enrolled..... | | 1,336 | 1,524 |

| Claims Experience | Number of | | Amount paid for | |
|---|----------------------|----------------|------------------------|---------------------|
| Type of Contract | Services Paid | | Member Services | |
| | 1976 | 1975 | 1976 | 1975 |
| Indemnity..... | 406,580 | 336,805 | \$15,329,088 | \$13,844,000 |
| Usual, Customary and Reasonable.... | *417,369 | *343,415 | 21,710,968 | 17,321,520 |
| Champus..... | *21,950 | *22,218 | 1,831,698 | 1,996,791 |
| Extended Benefits, BCBS Medicare Supplement, Major Medical and F.E.P. Supplemental..... | <u>159,713</u> | <u>144,307</u> | <u>11,535,017</u> | <u>9,396,936</u> |
| Grand Totals..... | 1,005,612 | 846,745 | \$50,406,771 | \$42,559,247 |

*82 Usual, Customary and Reasonable and Champus claims, representing less than .02% of claims submitted required Peer Review.

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Report From KMA Cancer Committee--

Do Estrogens Cause Cancer?

Estrogens have long been known as a growth-promoting agent for genital tissues, including the breast. Loeb, in 1919, demonstrated a relationship of estrogens to breast cancer in a strain of mice with an unusually high percentage of spontaneous breast cancers. The incidence of cancer was greatly decreased if the ovaries were removed early. This experiment has not been confirmed in any other type of animal, including the monkey. Allen and Doisey in 1923 discovered remarkable growth effects on vaginal epithelium with estrogen stimulation, although non-genital epithelia were not affected. Novak, in 1936, warned that estrogens may possibly cause endometrial cancer, or at least promote it. Since then a relatively few sporadic reports have appeared in the literature, which associate estrogens with cancer of the endometrium or breast. Most gynecologists and gynecologic pathologists believe that there is some connection between endometrial cancer and exogenous estrogens, although most patients with endometrial cancer have not received estrogens.

Three reports in the past year from the West Coast have indicated that the risk ratio of patients receiving estrogens, particularly conjugated estrogens (Premarin), was 4.5 (Smith, et al, of Seattle), 5.62 to 13.9 (Ziel and Finkle of Los Angeles), and finally, 5.6 (Mack, et al, Los Angeles). These risk ratios indicate that a patient who received this estrogen had from 4.6 to 13.9 times the expected incidence of endometrial cancer than patients not receiving hormonal treatment. Our own unpublished work indicates lower relative risk ratios of 2.9 to 3.1. Of the relatively few patients who received higher doses of Premarin over long periods of time (1.25 mgm. daily), the risk ratio was in the vicinity of 12.0. But from another point of view, the percentage of patients who develop endometrial cancer is low. In over 500 patients treated continuously with oral estrogens for an average of nine years and followed up to 25 years, only ten developed endometrial cancer, less than 2%.

In 1976 a detailed statistical study of 1,891 patients was reported. These women had received conjugated estrogens (Premarin), over an average period of 12 years, and were followed for up to 25 years. Forty-nine developed breast cancers, whereas 39.1 would be expected, on a basis of rates in the general population. The latter figure may or may not be accurate for this study, because our group was white and from the upper socio-economic strata, usually considered of higher risk. The relative risk ratio of the entire group was 1.3, although in 620 women who were followed longer than 15 years, the risk ratio was 2.0. The latter figure is of borderline significance. Again, the percentage of the 1,891 women who received Premarin over long periods and later developed breast cancer was 2.6%.

At the meeting of the Southern Surgical Association in December of 1976, Byrd, Burch, and Vaughn reported on 1,016 patients who had had hysterectomies and who had received Premarin over a period of ten years or longer. Twenty-four breast cancers were anticipated and 33 occurred. The death rates from breast cancer and various diseases were less than that expected from the population at large. Also, it was noted that the nulliparous women tended to have more breast cancers than the multiparous; this was not found in the previously noted Gray series. Also, it appeared to Byrd, et al, that patients beginning estrogens after age 55 may have an increased risk of breast cancer.

It is our opinion that estrogens may become a promotional agent in the development of endometrial cancer in a small percentage of patients receiving estrogens. For the patient with previous hysterectomy, obviously that risk is removed. Since it appears that 50% of all women within the next few years will have had a hysterectomy by the age of 50, these women will have been removed from risk. The fact that the disease occurs at an average age of 60 years, means that relatively few women's years of life may possibly be lost. The fact that cancer of the endometrium, if found quite early, has a cure rate of approximately 95% again reduces the risk to life factor. It behooves every physician administering estrogens to observe his patients most carefully for abnormal bleeding and have curettage performed promptly in those instances. Gynecologists must develop increasingly sophisticated methods of assessing the postmenopausal uterus.

As regards the breast, it appears to us at the present time that the risk of estrogen users developing cancer of the breast has not been conclusively determined. However, we strongly advise that patients with areas of thickening and nodularities in the breast should not receive estrogens. Certainly those with sizable cysts should not be treated with any estrogenic hormone. Those with close family relations with breast cancer should also have special consideration. The most important factors are the careful physical examinations made by the patient and her physician at intervals of six months to one year, with the use of mammography when indicated.

References

1. Hoover, R., Gray, L.A., Sr., Cole, P., MacMahon, B.: Menopausal estrogens and breast cancer. *N. Engl. J. Med.* 295:401-405, 1976.
2. Gray, L.A., Sr., Christopherson, W.M., Hoover, R.: Estrogens and endometrial carcinoma. *Obst. Gyn.* 49:105, 1977.
3. Byrd, B.F., Jr., Burch, J.C., Vaughn, W.K.: The impact of long term estrogen support after hysterectomy. A report of 1016 cases. *Ann. Surg.* (In press).

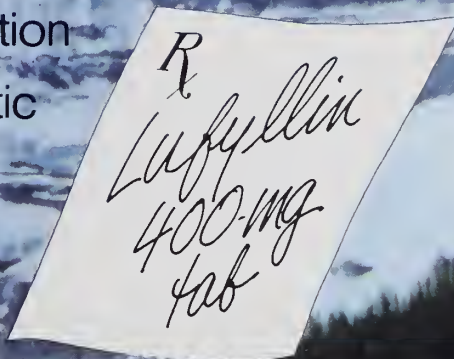
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Great caution should be used in giving dyphylline to patients in congestive heart failure. Such patients have shown markedly prolonged blood level curves which have persisted for long periods following discontinuation of the drug.

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2. Central nervous system stimulation: irritability, restlessness, insomnia, reflex hyperexcitability, muscle twitching, clonic and tonic generalized convulsions, agitation.

3. Cardiovascular: palpitation, tachycardia, extrasystoles, flushing, marked hypotension, and circulatory failure.

4. Respiratory: tachypnea, respiratory arrest.

5. Renal: albuminuria, increased excretion of renal tubule and red blood cells.

6. Others: fever, dehydration.

Dosage and Administration: Adults—Usual Dose—15 mg/kg every 6 hours, up to four times a day. The dosage should be individualized by titration to the condition and response of the patient, with therapeutic blood levels considered to be between 10 mcg/ml and 20 mcg/ml. Levels above 20 mcg/ml may produce toxic effects.

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Louisville, Kentucky

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Reiter's Syndrome

R. DIETZ WOLFE, M.D., ROBERT G. POPE, M.D., and RUSSELL T. MAY, M.D.

Louisville, Kentucky

A 28-year-old male with Reiter's Syndrome has been followed at the St. Joseph Infirmary Rheumatology Clinic. A case report and review of clinical features are presented.

THE 60 years since Hans Reiter first described the syndrome now bearing his name have added much to our knowledge about the presentation, clinical features, and natural course of the disease. Even his name for the syndrome, *Spirochetosis Arthritica*, was quickly withdrawn as its presumed etiology was never confirmed. The classical triad of conjunctivitis, non-gonococcal urethritis, and arthritis, with a self-limiting course has now gone by the wayside as cases with an incomplete triad and/or a more chronic course are being reported.¹

At the St. Joseph Infirmary Rheumatology Clinic, an interesting case has recently been followed and the case history follows.

Case Report

A 28-year-old Caucasian male presented to the St. Joseph Infirmary Rheumatology Clinic with a three-month history of generalized arthralgia and morning stiffness, effusions of the wrists, left knee and ankle, and non-pruritic pustular lesions of the glans penis and plantar surfaces of the feet. Ocular symptoms at present, or in the past, were denied.

[†]From the Department of Medicine, St. Joseph Infirmary, Louisville

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Past medical history revealed that muscular-skeletal complaints began at 22 years of age when he was treated for heel pain with Cortisone injections. A year later, he was treated for "gonorrhea" when he developed penile lesions and urethral discharge after an "out-of-town" sexual contact. The lesions and discharge cleared in several days but would intermittently recur once or twice yearly, clearing in several days spontaneously. Family history was negative for rheumatoid diseases.

The patient was evaluated by physical examination and laboratory methods. The initial admission disclosed a 28-year-old male who was acutely ill in moderate distress. A scaly dermatosis was evident on the scalp. Oral examination revealed small erythematous papules of the palate. The conjunctiva were normal. Hyperkeratotic plaques with erythematous borders encrusted the plantar surfaces. (Fig. 1) Onycholysis of both thumb nails was present. (Fig. 2) Effusions of the left knee and wrists were evident. The other joints were not remarkable. There were no penile lesions or evidence of urethral discharge.

During the hospital course the patient was treated with physical therapy, heat, rest, and Burrow's soaks. A trial of Phenylbutazone resulted in thrombocytopenia. Exacerbation of the arthritis occurred and erythematous patches developed on the glans penis. The patient was begun on Indomethacin and aspirin and his signs and symptoms subsided in several days.

Laboratory findings revealed a sedimentation rate of 34 mm/hr. Latex fixation, LE preps, and ANA were negative. VDRL was not reactive. The white count was 11,700 with a slight left shift. Hematocrit was normal. Normal sinus rhythm was present on EKG. Serum gonococcal antibodies

were not present. The urinalysis disclosed 10-12 RBC's on several occasions. Blood and urine cultures were negative. Arthrocentesis resulted in 45 cc of cloudy yellow fluid which grew no organisms when cultured.

Punch biopsy of plantar lesions were consistent with keratoderma blennorrhagica. Skeletal radiographs revealed marked demineralization, periosteal elevations, and cortical bone destruction at tendinous insertions. Hands (Fig. 3) and feet (Fig. 4) demonstrated marked demineralization of the tubular bones. There were numerous erosions of the metatarsal-phalangeal joints, most notably in the left 5th joint. Erosion and periosteal elevation were noted in the right distal fibula and tibia (Fig. 5) and both knees. (Fig. 6) A calcaneal spur with indistinct cortex was present on the left heel. (Fig. 7) Pelvic films (Fig. 8) showed slight fuzziness in the sacroiliac joints and periosteal elevation of the left ilium. There was no spondylosis evident.



FIG. 1. Plantar surfaces are encrusted with hyperkeratotic plaques with erythematous borders.

The patient's follow-up has been characterized by numerous admissions for exacerbations of his joint and skin conditions. The patient has been continued on an outpatient therapy of Indomethacin, 50 mg, four times a day and aspirin, 2-3 gm daily. Numerous flare-ups of his arthritis which have been unmanageable on an outpatient basis have necessitated admission for increased dosages of these drugs, along with the addition of steroids, rest, and physical therapy.

Discussion

Reiter's Syndrome, as suggested by our case, is certainly an interesting combination of rheumatoid and dermatological manifestations, much more than Hans Reiter would have ever envisioned. Our case is fairly classical in its presentation,



FIG. 2. Thumb nails with onycholysis.

clinical features, pathology, laboratory findings, and radiologic changes as they are known today.² The non-triad features are not only an interesting accompaniment, but lend strong evidence toward the diagnosis of Reiter's Syndrome when the triad is incomplete. We will thus briefly review the clinical aspects of the syndrome, with equal emphasis on classical and non-classical features of the disease.

Epidemiology

The etiology of Reiter's Syndrome is still presently unknown and all attempts to isolate causative organisms have been unsuccessful. However, in studying large series of cases, the syndrome has followed two inciting events, dysentery and sexual promiscuity. Reiter's Syndrome affects males far more commonly and in the age range of 20 to 40 years old. However, cases as young as two years old have been reported.³



FIG. 3. Demineralization of the tubular bones in the hand.

Clinical Features

Constitutional symptoms of malaise, anorexia, low-grade fever, and weight loss may precede, or accompany, the initial attack. The first manifestations may follow the inciting event by one to four weeks.

Joint Involvement. The arthritis of Reiter's Syndrome is usually one of the first signs and, of course, is part of the classical triad. Involvement is polyarticular, non-symmetrical, and can range from a mild synovitis to effusion with immobility. Fingers and toes are commonly involved, although other joints can become affected. It is common for numerous joints to be involved at the beginning of an attack for several days with only a few joints continuing to be symptomatic for several weeks thereafter. Other common skeletal findings are sacroiliitis and calcaneal spurring. Arthrocentesis reveals an inflammatory synovitis with clear fluid which clots readily. White counts range from several thousands up to a hundred thousand with 2-3% being large macrophages during an initial or florid attack. Radiographically, these skeletal changes are marked by erosions, demineralizations, periostitis, paravertebral ossification, and ankylosis.⁴

Genitourinary Involvement. The second feature of the triad is urethritis characterized by a mucopurulent, non-gonococcal discharge that can last from several days to several months. Dysuria may



FIG. 4. Demineralization of the tubular bones in the feet.



FIG. 5. Right distal fibula and tibia.

be present or the urethritis may be entirely asymptomatic. Other accompanying features include prostatitis, hemorrhagic cystitis, and seminal vesiculitis.

Ocular Signs. The remaining feature of the triad is conjunctivitis. Its manifestation may be florid, or it may be so mild and transient that it completely escapes recognition. Keratitis has also been reported as an associated finding.⁵

Mucocutaneous Signs. These findings, although not so descriptive as to be included in the triad, are of great value when the complete triad is not present. During oral examination, discrete gray papules, or 2-4 mm ulcerations of the palate or buccal mucosa, can be found. Geographic tongue (annulus migrans) has also been associated with Reiter's Syndrome.⁶

Balanitis circinata is the term for the penile lesions found in Reiter's Syndrome. These are described as serpiginous patches on the glans which have clear centers and scaling borders. On the soles and palms, keratoderma blennorrhagica may be evident. This hyperkeratotic process is

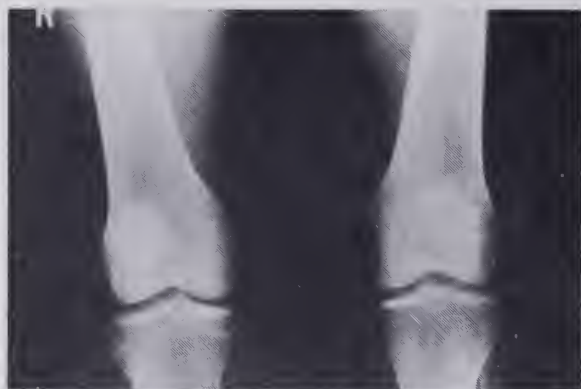


FIG. 6. Knees show erosion and periosteal elevation.

manifested by non-tender, thick, crusty plaques, sometimes coalescing to cover the whole surface. The nails can become opaque and brittle, although they do not pit. This is followed by onycholysis.

Gastrointestinal Symptoms. Diarrhea may be an inciting or accompanying event of Reiter's Syndrome. Reiter's Syndrome has been evident post-dysenteric after an epidemic with a *Shigella* strain.

Cardiac Involvement. Pericarditis, aortic insufficiency, and AV conduction disturbances can complicate Reiter's Syndrome. The aortic insufficiency is due to dilatation of the aortic ring.⁷ The conduction disturbances have been of such consequence to necessitate permanent pacing.⁸

Other Manifestations. Pleurisy, pneumonitis, and peripheral neuritis have been associated with Reiter's Syndrome, but not actually proven to be part of the syndrome at the present time. Amyloidosis has also been a fatal complication of the syndrome.⁹



FIG. 7. Left heel reveals a calcaneal spur with indistinct cortex.

Laboratory Findings

Due to the seronegativity of the disease, the laboratory is not a great aid in diagnosis. Usual findings include a mild leukocytosis, normochromic anemia, and elevated sedimentation rate. Prostatic secretions can disclose pus cells and macrophages. Urinalysis can show pyuria and hematuria. Cultures of joint fluid are negative. There is considerable evidence that the HLA-W27 is positive in well over half of Reiter's Syndromes.

The differential diagnosis of Reiter's Syndrome includes psoriatic arthritis, ankylosing spondylitis, rheumatoid arthritis, gout, Stevens-Johnson Syndrome, and gonococcal arthritis.



FIG. 8. Fuzziness in the sacroiliac joints and periosteal elevation of the left ilium revealed in pelvic films.

Course and Treatment

The course of Reiter's Syndrome ranges from the acute self-limiting form (one-fourth of cases) to a course of chronicity characterized by progressive incapacitation (one-fourth of cases). The remaining half have a course in between, characterized by remissions and exacerbations. Treatment for Reiter's Syndrome is palliative at the best, although the use of cytotoxic and immunosuppressive agents make the outlook for Reiter's Syndrome more favorable in the future.

Summary

Today the diagnosis of Reiter's Syndrome can be made, even though the classical triad of urethritis, arthritis, and conjunctivitis is incomplete. We have presented an interesting case of this sort which has been accompanied by some of the other salient clinical features that are now a part of the syndrome. We have reviewed briefly the

clinical features, laboratory findings, and course of Reiter's Syndrome as we know it today. It has thus been our purpose to present Reiter's Syndrome as it is presently being described because it has been stated that it may well be the most common form of acute inflammatory arthritis in the young male today.

References

1. Arnett, F. C., McClusky, O. E., Schacter, B. Z., and Lordon, R. E.: Incomplete Reiter's Syndrome: Discriminating Features and HL-A W27 in Diagnosis. *Ann. Intern. Med.* 84:8-12, January 1976.
2. Sharp, J. T.: Reiter's Syndrome. In *Arthritis and Allied Conditions*. J. L. Hollander, Ed. Philadelphia, Lea & Febiger, 1972, pp. 1229-1241.
3. Lockie, G. N. and Hunder, G. G.: Reiter's Syndrome in Children. *Arthritis Rheum.* 14:767-771, November-December 1971.
4. Sholkoff, S. D., Glickman, M. G., and Steinbach, H. L.: Roentgenology of Reiter's Syndrome. *Radiology* 97:497-503, December 1970.
5. Mills, R. P. and Kalina, R. E.: Reiter's Keratitis. *Arch. Ophthalmol.* 87:447-449, April 1972.
6. O'Keefe, E., Braverman, L. M., and Cohen, I.: Annulus Migrans. *Arch. Dermatol.* 107:240-244, February 1973.
7. Paulus, H. E., Pearson, C. M., and Pitts, W., Jr.: Aortic Insufficiency in Five Patients with Reiter's Syndrome. *Am. J. Med.* 53:464-472, October 1972.
8. Rossen, R. M., Goodman, D. J., and Harrison, D. C.: A-V Conduction Disturbances in Reiter's Syndrome. *Am. J. Med.* 58:280-284, February 1975.
9. Caughey, D. E. and Wakem, C. J.: A Fatal Case of Reiter's Disease Complicated by Amyloidosis. *Arthritis Rheum.* 16:695-700, September-October 1973.

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An Unusual Complication of Clavicular Fracture

HAL E. HOUSTON, M.D.

Murray, Kentucky

An unusual complication of a clavicular fracture, i.e., pseudocyst formation at the fracture site is presented. Other complications in the literature are reviewed. The cyst was excised with normal recovery.

FRACTURES of the clavicle are common occurrences in most any type of practice that deals with trauma. Most are easily treated and heal readily without difficulty. Rarely, complications develop such as nonunion^{1,2} and infection. These are seen far more frequently after compound fractures and/or operative procedures. Other reported complications include: brachial plexus damage by excessive callus formation^{3,4} or direct trauma, other types of combined neurovascular injury which may produce the thoracic outlet syndrome,^{4,6} isolated vascular injuries such as aneurysm formation,^{7,8} arterial thrombosis,⁹

and venous occlusion,^{1,10} osteolysis of various portions of the clavicle,¹¹⁻¹³ fractures of the first rib,¹⁴ and thoracic duct damage.¹⁵ An extensive review of complications is provided by Penn.⁷

A review of the literature revealed only one similar case of pseudocyst formation at the fracture site.⁴ This is a report of such a case.



FIG. 1. X-ray of simple displaced fracture of the mid-portion of left clavicle.

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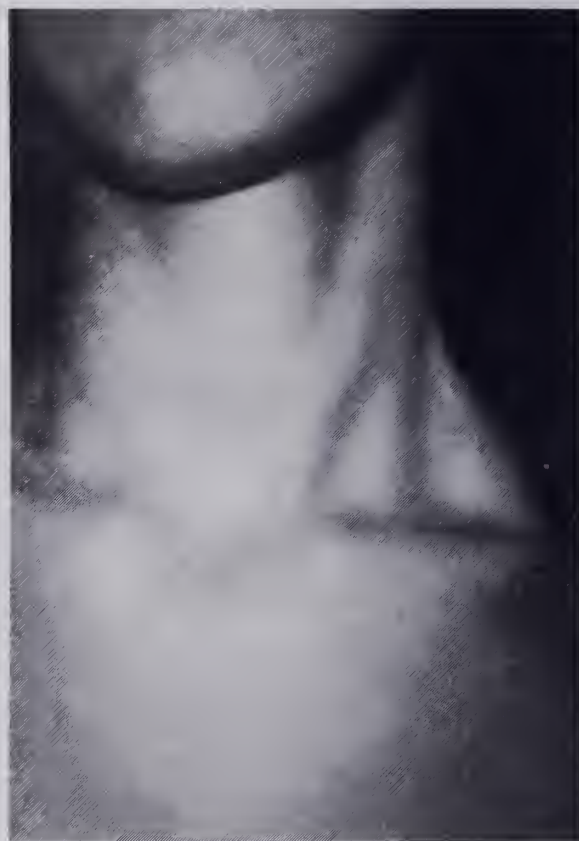


FIG. 2. Swelling on left side of neck.

Case Report

S.G., a 14-year-old male, sustained a simple displaced fracture of the mid-portion of the left clavicle (Fig. 1) while playing football. Reduction was accomplished with fairly good position of the fragments and a figure of eight splint applied. This was adjusted twice over the next week to obtain better alignment. However, he returned three weeks later complaining of swelling of the left side of his neck. Examination revealed a 3 cm × 3 cm cystic lesion of the left supraclavicular fossa



FIG. 3. Callus formation noted on x-ray.

just above the fracture site. (Fig. 2). X-ray showed good position and callus formation. (Fig. 3). Aspiration was performed and 10 cc of clear serous fluid obtained. This was repeated on four occasions over the next two weeks. It was then felt that exploration was in order. This was done and a 5 cm × 6 cm fibrous lined pseudocyst was excised which arose directly from the fracture site. (Fig. 4). Recovery was uneventful with no sign of recurrence four years later.

References

1. Allen, W. C.: Post-Traumatic Osteolysis of the Distal Clavicle. *Post. Grad. Med.* 41:A-73-A-77, 1967.
2. Bateman, J. E.: Neurovascular Syndromes Related to the Clavicle. *Clin. Ortho.* 58:75-82, 1968.
3. Berkheiser, E. J.: Old United Clavicular Fractures in the Adult. *Surg., Gynec., and Obstet.*, 64:1064-1072, 1937.
4. Brewer, L. A. III: Surgical Management of Lesions of the Thoracic Duct. *Am. J. Surg.*, 90:210-227, 1965.
5. DeBakey, E.; Beall, C. Jr.; and Wakasch, D. C.: Recent Development in Vascular Surgery with Particular Reference to Orthopedics. *Am. J. Surg.* 109:134-142, 1965.
6. Enker, S. H. and Murphy, K. K.: Brachial Plexus Compression by Excessive Callus Formation Secondary to a



FIG. 4. Pseudocyst arising from fracture site.

- Fractured Clavicle: A Case Report. *Mt. Sinai J. Med.* 37: 678-682, 1970.
7. Ghormley, R. K.: Ununited Fractures of the Clavicle. *Am. J. Surg.*, 51:343-349, 1941.
8. Guilfoil, P. H. and Christiansen, T.: An Unusual Vascular Complication of Fractured Clavicle. *JAMA* 200:178, 1967.
9. Howard, F. M. and Shafer, S. J.: Injuries to the Clavicle with Neurovascular Complications. *J. Bone & Joint Surg.*, 47:1335-46, 1965.
10. Jacobs, P.: Post-Traumatic Osteolysis of the Outer End of the Clavicle. *J. Bone & Joint Surg.* 46B, 705-707, 1964.
11. Madsen, B.: Osteolysis of the Acromial End of the Clavicle Following Trauma. *Brit. J. Radiol.* 36:822-828, 1963.
12. Mital, M. A. and Aufrane, O. E.: Venous Occlusion Following Greenstick Fracture of Clavicle. *JAMA* 206:1301-1302, 1968.
13. Neer, C. J. II: Non-union of the Clavicle. *JAMA*, 172: 1006-1011, 1960.
14. Penn, I.: The Vascular Complications of Fractures of the Clavicle. *J. Trauma.* 4:819-831, 1964.
15. Weiner, D. S. and O'Dell, H. W.: Fractures of the First Rib Associated with Injuries to the Clavicle. *J. Trauma.* 9:412-422, 1969.

LSD Toxicity: A Suspected Cause of Death

E. ALLEN GRIGGS, M.D.*, and MICHAEL WARD**

Somerset and Frankfort, Kentucky

An extremely high liver tissue level of lysergic acid diethylamide (LSD) was measured in a 34-year-old male in whom autopsy showed no anatomic cause of death. Death from LSD overdose apparently has not been previously confirmed toxicologically. The possibility that this case represents death due to toxic effect of LSD is discussed.

Case Report

A partially clothed 34-year-old male was observed while engaged in bizarre behavior, and was subsequently accosted during an attempted break-in in November, 1975. He fled the scene and was found dead in a deserted warehouse, one month later. An autopsy was performed to ascertain the cause of death.

Autopsy Findings

The body was well preserved, measuring 179.0 cm in length and weighed 69 kg. The skin and exposed mucous membranes contained multiple excoriations consistent with rodent bites. No venipuncture wounds were present and no external signs of significant trauma were noted. The larynx was intact with no evidence of obstruction or fracture. The distal trachea contained mild mucosal erythema. The lungs were dry and well expanded; their combined weight was 650 gms. There was no evidence of aspiration of gastric contents. The stomach and intestine were empty, and contained no gross evidence of prior medication. Their mucosal surfaces demonstrated moderate autolysis. The heart weighed 305 gms and demonstrated very slight right atrial dilatation.

*Associate Pathologist, Lake Cumberland Medical Center, Somerset

**From Toxicology Laboratory, Bureau for Health Services, Frankfort

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The abdominal viscera were the site of mild autolysis and moderate congestion. The brain was swollen, weighing 1450 gms, with slight widening of gyri, narrowing of sulci, and meningeal vascular congestion. Evidence of herniation was absent. The subarachnoid fluid was clear.

Histologic study revealed minimal autolysis, considering the long postmortem interval. Sections of the brain showed mild cerebral swelling with focal cortical neuronal degeneration. Sections of the larynx and trachea revealed mucosal congestion, and those of the lungs displayed congestion and occasional focal acute interstitial hemorrhages. Sections of the liver displayed venous congestion with focal early centrilobular necrosis and scattered intranuclear vacuolization of hepatocytes. There was no evidence of a generalized hemorrhage diathesis.

Toxicology Studies

Lysergic acid diethylamide (LSD) was detected in liver tissue by spectrophotometric fluorometry and quantitated at 0.312 mgm/dl, utilizing the procedure of Axelrod.¹ The presence of the drug was confirmed by thin layer chromatography using a methanol-chloroform solvent. Plates were examined under ultraviolet light at 357 nm, and P-dimethylaminobenzaldehyde used as a developing spray.² Diethylamine contamination was excluded. No other drugs were detected in the liver by gas chromatography, thin layer chromatography, or ultraviolet spectrophotometry. No ethyl alcohol was detected in the blood by gas chromatography.

Comment

Metabolic studies of LSD in humans are incomplete and no direct evidence concerning lethal doses exists. The LD₅₀ varies among other mammalian species from 0.1 mgm/kg, I.V., in Asiatic elephants to 46 mgm/kg in mice, the variation ascribed to metabolic differences.^{3,4} From these data an interpolated lethal dose for humans of 0.2 mgm/kg, or 14 mgm, has been calculated.⁴ In regard to tissue levels, 1 mgm of LSD/kg,

I.V., produces a liver level of 0.67 ug/gm in the cat.⁵

Utilizing these data for means of general comparison—as tissue level studies in humans have not been reported—the subject of this report would have received an LSD dose equivalent to 320 mgm, I.V., or 23 times the previously calculated lethal human dose. This amount is 1600—800 times the usual “street” dose of 200 - 400 ug, p.o.⁴

LSD-altered neuronal activity with glial cell vacuolization in tissue culture has been reported, as well as changes in various enzyme actions in brain homogenates.⁶ Also, an LSD effect on 5-hydroxy tryptamine—containing neurons appears likely, and studies localize this action to the raphe neurons of the brain stem.⁷

Documented pathopharmacologic effects of LSD overdose in humans include tachycardia, hyperpyrexia, and blood pressure and respiratory depression.⁸ Grand mal seizures have been reported.⁹ Platelet dysfunction with mild generalized bleeding has been described.¹⁰

In a recent clinical series, 3 of 8 patients with massive LSD overdose underwent respiratory arrest requiring intubation and ventilatory assistance.¹⁰

In the present case, a careful dissection revealed no gross anatomic cause of death. Hence, it appears possible that this man expired from CNS-mediated respiratory arrest due to the direct toxic effect of massive LSD overdose.

References

1. Axelrod, J., Brady, R. O., Witkop, B., and Evarts, E. V.: The distribution and metabolism of lysergic acid diethylamine, *Ann. N.Y. Acad. Sci.* 66:435-444, 1957.
2. Clarke, E. G. C. *Isolation and Identification of Drugs*, 395-396, Pharmaceutical Press, London, 1969.
3. West, L. J., Pierce, C. M., and Thomas, W. D. Lysergic acid diethylamide: its effects on a male asiatic elephant, *Science* 138:1100, 1962.
4. Hoffer, A. D-lysergic acid diethylamide (LSD): A review of its present status, *Clin. Pharmacol. Therapy* 6:183, 1965.
5. Stoll, A., Rothlin, E., Rutschmann, J., and Schalch, W. R.: Distribution and fate of ¹⁴C-labelled lysergic acid diethylamide (LSD-25) in the animal body, *Experientia* 11:396-397, 1955.
6. Caldwell, J. and Sever, D. S.: The biochemical pharmacology of abused drugs. Amphetamines, cocaine, and LSD. *Clin. Pharmacol. and Therapeutics* 16:631-635, 1974.
7. Aghajanian, G. K. and Asher, I. M.: Histochemical fluorescence of raphe neurons: Selective enhancement by tryptophan, *Science* 172:1159-1161, 1971.
8. Rothlin, E.: Pharmacology of lysergic acid diethylamine and some of its related compounds. *J. Pharm. Pharmacol.* 9:569-587, 1957.
9. Cohen, S.: Psychotomimetic agents, *Ann. Rev. Pharmacol.* 7:301-318, 1967.
10. Klock, J. C., Boerner, U., and Becker, C. E. Coma, hyperthermia, and bleeding associated with massive LSD overdose, a report of eight cases. *Clin. Toxicol.* 8(2):191-203, 1975.

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GRAND ROUNDS



University of Louisville School of Medicine

This Journal feature will be presented alternately by the University of Louisville and the University of Kentucky Departments of Medicine and Departments of Surgery. We hope to have these features revolve around subjects of immediate practical interests to the practicing physician; and, for those of us not able to attend grand rounds in the teaching centers as often as we might, we hope this will represent a bit of a refresher course.

Cerebral Ischemia Induced by Effort: "The Steal Syndromes"*

The recognition of cerebral vascular insufficiency precipitated by voluntary muscular activity has been an intriguing subject. Only with improved understanding of the anatomic, hemodynamic, and radiologic features of these conditions has surgical intervention been successful. The two major diseases included are the subclavian steal and carotid steal syndromes. Diagnosis can be made with a high degree of certainty on appropriate physical examination, but it must be confirmed by angiography.

Subclavian Steal Syndrome

Only during the past 15 years has subclavian steal syndrome been recognized as a cause of cerebral ischemic symptoms. Two patients were recently seen at the Louisville Veterans Administration Hospital with this syndrome, which prompted the present review of its salient features.

Patient 1. A 65-year-old man was admitted in June 1976, with a three-month history of weakness in his left upper extremity, blurring of vision in the left eye, and dizziness, particularly on abducting and extending the left upper extremity.

Physical examination showed a markedly diminished left radial pulse when compared to the right. Blood pressure in the left arm was 70/40; in the right arm, 130/60. There were no audible

bruits about the neck, chest, or axilla. Arteriography demonstrated a complete occlusion of the left internal carotid artery, 90% stenosis of the left subclavian artery, 30% stenosis of the right subclavian artery, and filling of the left subclavian artery via retrograde flow from the left vertebral artery (Figs. 1 and 2).

The patient subsequently underwent a left common carotid-subclavian bypass with a saphenous vein graft. Because the left internal carotid was completely occluded, carotid endarterectomy was not feasible. Postoperatively, left arm blood pressure rose to 120/70. All symptoms of arm weakness have resolved. He continues to have occasional dizziness, but this too has lessened in frequency and severity.

Patient 2. A 56-year-old man was admitted in July 1976, with a 2½-year history of dizziness and bilateral dim vision, occurring in episodes lasting two to three minutes. These episodes occurred once per month until three months before admission, at which time they became more frequent. The symptoms were not related to activity. There were no symptoms in either upper extremity.

Examination disclosed no palpable pulse in the left upper extremity. Blood pressure in the right arm was 130/80; in the left arm, it was 60 systolic (Doppler). There were no audible bruits. Arteriography demonstrated a 90% stenosis of the proximal left subclavian artery with retrograde filling of the left subclavian by reflux through a normal-sized left vertebral artery.

He underwent a left common carotid-subclavian bypass using a 10-mm. Dacron graft. Postoperative blood pressure in the left upper

*From the Department of Surgery and the Section of Neurological Surgery, the University of Louisville School of Medicine, Health Sciences Center, Louisville, Kentucky, and the Veterans Administration Hospital, Louisville, Kentucky.

Reprint requests should be addressed to the Department of Surgery.

extremity was 130/70. This patient has had complete resolution of his symptoms.

Pathophysiology

The subclavian steal syndrome is characterized by reversal of blood flow in the vertebrobasilar segment of the cerebral circulation as a sequel to arterial stenosis or occlusion in the innominate artery or subclavian artery proximal to the origin of the vertebral artery. The resultant reduction in subclavian arterial pressure distal to the obstruction creates a pressure gradient between the vertebrobasilar circulation and the affected subclavian circulation. The net effect of this pressure gradient is reversal of arterial flow in the ipsilateral vertebral artery, with siphoning of blood from the opposite vertebral artery, basilar artery, and even the carotid circulation via the circle of Willis on occasion. A 10% reduction in pressure will produce reversed flow in the vertebral artery⁷; 50% stenosis of the subclavian or innominate artery will reduce the arterial pressure by 10%.²

The presence of an arterial pressure gradient between the subclavian and vertebral arteries, however, may not result in significant clinical symptomatology, because alternate collateral channels may prevent significant blood flow deprivation in the vertebrobasilar system. Collateral flow contributed by branches of the external carotid artery, namely, the occipital and posterior auricular arteries, will supply the posterior circulation by their communication with muscular branches of the vertebral artery. Moreover, the thyrocervical trunk and intercostal arteries via the internal mammary artery all represent anastomotic pathways that would minimize loss of flow from the posterior cerebral circulation. The development of collaterals is the critical determinant in the production of symptoms. Thus, high-grade stenosis or total obstruction of the proximal subclavian artery may exist but not be clinically significant because of the abundance of alternate collateral flow.

Etiology

The critical lesion responsible for the hemodynamic changes producing the subclavian steal is stenosis or occlusion of the innominate or subclavian artery proximal to the origin of a patent vertebral artery. Although there are many causes of subclavian or innominate obstruction, the vast majority are of atherosclerotic origin, with 75%



FIG. 1. Arch arteriogram showing 80% stenosis of proximal left subclavian artery.

occurring on the left and 25% occurring on the right.

A variety of rare lesions may cause this syndrome. Such lesions may be secondary to congenital atresia or stenosis proximal to the vertebral artery origin. Kinking of the subclavian artery may also be sufficiently severe to create a pressure reduction distal to the kink. Emboli to the proximal subclavian artery may result in its occlusion and cause reversal of flow in the ipsilateral vertebral artery. These emboli arise secondary to atrial fibrillation or acute myocardial infarction with mural thrombi.

Surgical or traumatic disruption of the proximal subclavian artery can also lead to a steal syndrome. Blalock-Taussig shunts, ligation of the subclavian artery during repair of a thoracic-aortic aneurysm, distortion of a suture line after repair of an aortic coarctation, and clavicular fractures from blunt trauma occasionally are responsible.

Signs and Symptoms

Symptoms of the subclavian steal syndrome result from reduction of blood flow in the vertebrobasilar distribution and ischemia in the involved upper extremity. Transient symptoms associated with vertebrobasilar insufficiency are cortical blindness, vertigo, homonymous hemianopsia, diplopia, ataxia, dysarthria, and drop attacks. Upper extremity ischemia may result in paresis, paresthesias, and intermittent claudication. Table I gives the relative frequency of these symptoms in a reported series of 168 patients with symptomatic subclavian steal.⁵ Muscular activity

is often required in the involved arm to provoke symptoms of cerebral or extremity ischemia.

A pulse deficit in the involved extremity and a significant differential in blood pressures between the upper extremities are the crucial physical findings which suggest this syndrome. The average systolic blood pressure difference was 45 mm Hg in the series of patients reported by Fields and Lemak.⁵

Diagnosis

Confirmation of the diagnosis of subclavian steal syndrome requires arteriographic demonstration of retrograde flow in the vertebral artery on the affected side. Arteriography should be done as an aortic arch study in order to document the steal. If contrast material is injected directly into the vertebral or subclavian arteries by selective catheterization, the transient pressure increases associated with the injection of the contrast material may result in the creation of a false pattern of reversed flow in the contralateral vertebral artery. Retrograde brachial injection should be avoided for the same reason.

Treatment

The goals of treatment for patients with subclavian steal syndrome are to alleviate major symptoms of vertebrobasilar insufficiency and upper extremity ischemia. This is achieved by increasing blood flow and arterial pressure in the affected subclavian vessel, thereby supplying the ischemic upper extremity with increased arterial flow and normalizing the direction of flow in the vertebral artery arising from the obstructed subclavian artery.

As in any evaluation, risk factors versus potential benefits dictate which patients are surgical candidates. Careful assessment of cardiac status is mandatory in these high-risk patients, as subclavian stenosis is usually only one facet of gen-



FIG. 2. Delayed films showing retrograde flow from the vertebral to subclavian artery.

eralized atherosclerotic vascular disease. A thorough pulmonary evaluation is likewise very important, because excessive tobacco consumption frequently is seen in this group of patients.

The diffuse nature of atherosclerosis necessitates extracranial panangiography to determine whether any other disease is present in the carotid or vertebral arteries. Previous studies have reported a 70-80% incidence of associated lesions.^{3,5} If a contralateral carotid lesion is present, this should first be managed with carotid endarterectomy, as improved flow in the contralateral side may alleviate vertebrobasilar symptoms. If ipsilateral carotid stenosis exists, both carotid endarterectomy and subclavian bypass procedures should be carried out simultaneously.

Numerous surgical methods have been devised to treat the subclavian steal syndrome. The first was ligation of the vertebral artery on the side of the steal.⁸ This procedure is effective in eliminating the steal phenomenon but does nothing to improve the subclavian artery flow or alleviate upper limb ischemia. The hazard of a propagated thrombus from the vertebral to basilar artery by this procedure has not been realized. This procedure is still occasionally justified in very high risk patients with predominant vertebrobasilar insufficiency and minor limb claudication because of its technical ease and low risk.

Direct attack of the primary lesion by subclavian endarterectomy or by bypass of the obstructing lesion by aortosubclavian graft has been suggested. Results have been good, but the complication rate for the transthoracic approach is prohibitive,^{3,5} with operative mortality of 8-20%. Thus, this procedure is infrequently recommended.

The carotid-subclavian bypass is currently the

Table I
FREQUENCY OF SYMPTOMS IN SUBCLAVIAN STEAL SYNDROME*

| Symptom | Percent |
|---------------------------|---------|
| Vertigo | 52 |
| Limb paresis | 34 |
| Paresthesias | 33 |
| Bilateral visual | 31 |
| Ataxia | 26 |
| Unilateral visual | 16 |
| Mental changes | 15 |
| Intermittent claudication | 13 |
| Dysarthria | 12.5 |

*Modified from Fields and Lemak.⁵

procedure of choice. Advantages include reliability, avoidance of the transthoracic approach and its problems, and relative technical simplicity and safety, with a mortality rate of less than 2%.³ Both saphenous vein and Dacron grafts have been used. Such a bypass could result in deprivation of carotid blood flow by creation of this proximal shunt from the carotid. In the absence of significant bifurcation disease in the carotid artery, this danger seems largely theoretical and adverse effects have not been documented.

The subclavian-subclavian bypass⁶ and the axillary-axillary bypass⁹ are two new procedures that have been introduced recently for the management of subclavian steal. The subclavian-subclavian bypass avoids carotid manipulation but is technically a more difficult procedure than the carotid-subclavian bypass and also presents the danger of bilateral phrenic nerve injury. The axillary-axillary bypass avoids manipulation of the carotid, avoids the risk of injuring the phrenic nerve, and can be done under local anesthesia. It does require a long subcutaneous tunnel over the anterior chest which may result in a long-term failure attributable to graft occlusion from external pressure. The long-term patency of this procedure has not been documented.

Finally, asymptomatic subclavian steal syndrome may be suspected in the patient with a pulseless upper extremity or proved in the occasional patient undergoing aortic arch arteriography for other reasons. The patient without symptoms is not a candidate for surgical therapy, because operation for subclavian steal is only for relief of incapacitating symptoms and has not been shown to improve longevity.

Carotid Steal Syndrome

Another interesting example of cerebrovascular insufficiency is the carotid steal syndrome. First recognized in 1970,¹ it is a frequently observed radiographic finding; however, less than 50% of radiographically diagnosed cases have corresponding symptoms.

Pathophysiology and Etiology

Angiography rarely demonstrates recognizable communications between the branches of the external carotids and between the external carotid and the vertebrobasilar circulation.⁴ That the latter anastomosis exists is evident with advancing obliterative disease causing external carotid

stenosis or occlusion. Such lesions produce a decreased flow and, hence, decreased pressure distal to a 50% stenotic lesion with dilatation of anastomosis usually functioning on a microcirculatory level. Because of the lower blood pressure in the external carotid and posterior fossa territory, blood is diverted from the vertebrobasilar circulation to the external carotid distribution supplying the scalp and face.

Signs and Symptoms

This diversion of blood may become severe enough to promote brain stem ischemic symptoms similar to those of the subclavian steal syndrome (e.g., vertigo, diplopia, drop attacks, cortical blindness, and so forth). These symptoms may be initiated by chewing, talking, and throat muscle activity; such activity increases the metabolic demand of the muscles of the face and of mastication, which are supplied by the external carotid artery. Patients experience claudication of masseter and temporalis muscles. Physical examination may disclose a bruit overlying the stenotic lesion with delay or diminution of the superficial temporal pulse on the involved side.

Diagnosis

Diagnosis is confirmed by four-vessel angiography, with contrast media diverted from the vertebral artery to the external carotid artery via the enlarged, tortuous, vertebral occipital anastomosis. Significant carotid disease will also be shown by such a study.

Difficulty in implicating the angiographic findings with the patient's symptoms is frequently noted. In no more than 50% of abnormal angiograms can any correlation with the patient's symptoms be made.

Treatment

Treatment is indicated in very few severely symptomatic cases because the abnormal angiographic appearance may be associated with very minor symptoms or none at all. If treatment is indicated, it is directed toward repair of the common or external carotid stenosis. Even though occlusion of the occipital artery seems the logical method, new collateral systems would be set up between the vertebral and external carotid should the pressure differential persist between these two vessels. The few patients who have been

(Continued on page 205)



EDITORIAL



The Old Medical School Building

Despite the elegance and beauty of the Preston Street quarters of the University of Louisville School of Medicine, there has been a deep regret at the loss of communion with the Old Medical School Building by the numerous graduates who spent four years there. Only a few have called it beautiful but this massive rock castle at Chestnut and First Streets is at the very least distinctively unique. The permanence of monument characterizes the huge thick walls, the ornate windows, and the large square corner tower.

In 1973 there was consideration of the incorporation of the building into the Jefferson Community College but more recently there has been serious thought of destruction of the building. However, in 1976 the Medical Foundation of the Jefferson County Medical Society began to explore the possibility of converting it into a permanent home for the Medical Society. Informal but widespread inquiries into the opinions of Medical Society members about this idea showed a surprising enthusiasm even among many doctors who had not graduated from there but had come also to have love and reverence for the building.

Then came months of hard work by the Medical Foundation and Board of Trustees to determine whether or not reoccupation and use of the


Old Medical School Building were practical or even possible. It is, in fact, practical even though the final result will be a totally renewed and replaced interior. The renovation would provide superb offices and meeting facilities for the Jefferson County Medical Society as well as make space available for leasing to other medically-oriented organizations. Such leasing would provide income to help support the renovation and eventual amortization of the debt would be expected in 20 years. The cost of the project is estimated at less than 1.6 million dollars.

The building is of particular architectural and historical significance and is listed on the National Register of Historic Places. Because of this the project is eligible for Federal restoration funds and a grant through the Kentucky Heritage Commission is likely.

Currently there is a great deal of detail work, time, and patience being invested by the Medical Foundation Board in negotiations with the University of Louisville for acquisition of the property.

We hope that the unusual effort given by the Medical Foundation will be rewarded with the relief and gratitude of all the Kentucky physicians who have a lasting memory and love for the Old Medical School.

AEO



Natural balance doesn't always come naturally

Big Balanced Rock, Chiricahua Mountains, Arizona (approx. 1,000 tons)

Widely Prescribed—Antivert is the most widely pre-
sented agent for the management of vertigo* associated with
diseases affecting the vestibular system such as Menière's disease,
vestibular neuritis, and vestibular neuronitis.

Effective for Nausea and Vomiting—Antivert/25 can relieve the
nausea and vomiting often associated with vertigo*.

Highly Effective for Vertigo*—The usual adult dosage for Antivert/25
is 25 mg t.i.d.

SUMMARY OF PRESCRIBING INFORMATION

INDICATIONS. Based on a review of this drug by the National Academy of
Sciences—National Research Council and/or other information, FDA has classified
indications as follows:

Indication: Management of nausea and vomiting and dizziness associated with
vertigo.

Effectiveness: Management of vertigo associated with diseases affecting the
vestibular system.

Classification of the less than effective indications requires further
evaluation.

CONTRAINDICATIONS. Administration of Antivert (meclizine HCl) during preg-
nancy or to women who may become pregnant is contraindicated in view of the
teratogenic effect of the drug in rats.

The administration of meclizine to pregnant rats during the 12-15 day of gestation
has produced cleft palate in the offspring. Limited studies using doses of over 100 mg/
kg/day in rabbits and 10 mg/kg/day in pigs and monkeys did not show cleft palate.
Congeners of meclizine have caused cleft palate in species other than the rat.

Meclizine HCl is contraindicated in individuals who have shown a previous hyper-
sensitivity to it.

WARNINGS. Since drowsiness may, on occasion, occur with use of this drug, patients
should be warned of this possibility and cautioned against driving a car or operating
dangerous machinery.


Usage in Children. Clinical studies establishing safety and effectiveness in children
have not been done; therefore, usage is not recommended in the pediatric age group.

Usage in Pregnancy. See "Contraindications."

ADVERSE REACTIONS. Drowsiness, dry mouth and, on rare occasions, blurred
vision have been reported.

More detailed professional information available on
request.

ROERIG 
A division of Pfizer Pharmaceuticals
New York, New York 10017

Antivert[®]/25 
(meclizine HCl) 25 mg. Tablets
for vertigo*

DYAZIDE[®]

Each capsule contains 50 mg. of Dyrenium[®] (triamterene, SK&F Co.) and 25 mg. of hydrochlorothiazide.

Trademark

MAKES SENSE FOR LONG-TERM CONTROL OF HYPERTENSION*



Before prescribing, see complete prescribing information in SK&F Co. literature or **PDR**. A brief summary follows:

* WARNING

This fixed combination drug is not indicated for initial therapy of edema or hypertension. Edema or hypertension requires therapy titrated to the individual patient. If the fixed combination represents the dosage so determined, its use may be more convenient in patient management. The treatment of hypertension and edema is not static, but must be reevaluated as conditions in each patient warrant.

* **Indications:** When the fixed combination represents the dosage determined by titration: Adjunctive therapy in edema associated with congestive heart failure, hepatic cirrhosis, the nephrotic syndrome. Corticosteroid and estrogen-induced edema, idiopathic edema; hypertension, when the potassium-sparing action of its 'Dyrenium' component is warranted.

Contraindications: Further use in progressive renal or hepatic dysfunction; hyperkalemia. Pre-existing elevated serum potassium. Hypersensitivity to either component or other sulfonamide-derived drugs. Routine use of diuretics in otherwise healthy pregnancy.

Warnings: Do not use potassium supplements, dietary or otherwise, unless hypokalemia develops or dietary intake of potassium is markedly impaired. If supplementary potassium is needed, potassium tablets should not be used. Hyperkalemia can occur, and has been associated with

cardiac irregularities. It is more likely in severely ill patients with urine volume less than one liter/day, the elderly or diabetics, with suspected or confirmed renal insufficiency. Periodic determinations of serum K^+ should be made. If hyperkalemia develops, substitute a thiazide alone, restrict K^+ intake. The presence of a widened QRS complex or arrhythmia in association with hyperkalemia requires prompt additional therapy. Thiazides are reported to cross the placental barrier and appear in breast milk; fetal or neonatal hyperbilirubinemia, thrombocytopenia, altered carbohydrate metabolism and other adverse reactions that have occurred in the adult may result. When used in pregnancy or in women who might bear children, weigh potential benefits against possible hazards to fetus. Adequate information on use in children is not available.

Precautions: Do periodic serum electrolyte determinations (particularly important in patients vomiting excessively or receiving parenteral fluids). Periodic BUN and serum creatinine determinations should be made, especially in the elderly, diabetics, or those with suspected or confirmed renal insufficiency. Watch for signs of impending coma in severe liver disease. If spiro-lactone is used concomitantly, determine serum K^+ frequently; both can cause K^+ retention and elevated serum K^+ . Two deaths have been reported with such concomitant therapy (in one, recommended dosage was exceeded, in the other serum electrolytes were not properly monitored). Observe regularly for possible blood dyscrasias, liver damage, other idiosyncratic reactions. Blood dyscrasias have been reported in patients receiving Dyrenium[®] (triamterene, SK&F Co.), and

leukopenia, thrombocytopenia, agranulocytosis and aplastic anemia have been reported with thiazides. Do periodic blood studies in cirrhosis to check for nondrug-related variations in pictures, and in patients with folic acid deficiency since 'Dyrenium' may contribute to appearance of megaloblastosis. Antihypertensive effect may be enhanced in post-sympathectomy patients. Use cautiously in surgical patients. The following may occur: transient elevated BUN or creatinine, or both, hyperglycemia and glycosuria (diabetes requirements may be altered), hyperkalemia and gout, digitalis intoxication (in hyperkalemia), decreasing alkali reserve with metabolic acidosis. 'Dyazide' interferes with fluorescent measurement of quinidine.

Adverse Reactions: Muscle cramps, weakness, dizziness, headache, dry mouth; anaphylaxis, urticaria, photosensitivity, purpura, dermatological conditions; nausea and vomiting, diarrhea, constipation, other gastrointestinal disturbances. Necrotizing vasculitis, paresthesias, icterus, pancreatitis, xanthopsia and allergic pneumonitis have occurred with thiazides alone.

Supplied: Bottles of 100 and 1000 capsules. Single Unit Packages of 100 (intended for institutional use only).

SK&F CO., Carolina, P.R. 006: Subsidiary of SmithKline Corporation

TRIAMTERENE CONSERVES POTASSIUM WHILE HYDROCHLOROTHIAZIDE LOWERS BLOOD PRESSURE

From The Editor's Notebook

200,000,000

CBMT, Then and Now

Diabetes mellitus is a prevalent disease—200 million diabetics in the world—a common metabolic disorder with a clinically important vascular component: premature vascular degeneration, accelerated atherosclerosis, microangiopathy. And CBMT (capillary basement membrane thickening) is a basic characteristic of the vascular component, but its significance is not clear; controversy prevails.

In March 1963 there was a Conference on Small Blood Vessel Involvement in Diabetes Mellitus and in the Introduction to the Proceedings edited by Marvin Siperstein et al the goals of the conference were outlined: “. . . to allow a critical evaluation of the current evidence suggesting that diabetes mellitus may not be primarily a disease of the pancreas but may instead represent a disorder of the basement membrane.” Siperstein also noted facts that “now makes much more tenable the possibility that the primary etiology of diabetes mellitus may lie in a defect of the basement membrane of the body.” Doctor Siperstein was here in Louisville in 1968 (11th Annual Postgraduate Seminar of the Norton Memorial Infirmary) and wrote of his studies in “The Seminar in Print”: “These results suggest that diabetic microangiopathy is not directly caused by the carbohydrate abnormalities of diabetes, and suggest that this vascular disease represents an independent and possibly a primary lesion of the diabetes syndrome.” In 1971 (“Capillary Basement Membrane in Diabetes” in *Diabetes Mellitus*, Volume III) Siperstein wrote that thickening of the basement membrane was a relatively constant feature of overt diabetes and was found rarely in cases of hyperglycemia from other causes. In 1974 he and his group recognized that basement membrane hypertrophy may not be the primary lesion of diabetes mellitus.

In an excellent review article, with abstracts, (Williamson, J.R., and Kilo, C., Current Status of Capillary Basement Membrane Disease in Diabetes Mellitus. *Diabetes* 26: 65-75, January, 1977) it is noted that “The pathophysiologic significance of CBMT remains unclear, since neither specific cause(s) nor physiologic consequence(s) of CBMT have been delineated” and that “thickening of CBM associated with diabetes follows, rather than precedes, the metabolic perturbations associated with insulin deficiency” and that the first conclusion is

“Capillary basement membrane thickening (CBMT) associated with diabetes mellitus appears to be a complication of the insulin-deficient state.” The pendulum swings!

JSL

The Years of Your Life

I read a fun article the other day. It was in the January 17, 1977, edition of the *New York Magazine* (not the *New Yorker* magazine) and it had to do with how long one can expect to live. It was titled “How to Pass the Test of Time” and was written by Mark Jonathan Harris. Encompassed in the article was a table and a small test that one could measure one's life-expectancy. Interestingly enough, the test was first designed by Doctor Diana S. Woodruff of Temple University and was published initially in *Family Health*, January, 1975.

In this article you take your current age and this gives you a corresponding life-expectancy. You are then asked 19 questions concerning heredity, health and diet, education, occupation, and life-style. From these 19 questions you are allowed to either add or subtract a specified number of years according to the beneficial or harmful effects assessed from each question. For example, under health and diet there is a question regarding weight, whereby you subtract one year of life for each ten pounds overweight. Yet under drinking, heavy drinkers must subtract eight and teetotalers must subtract one, whereas a moderate drinker may add three to his life-expectancy.

Even in areas of sleep, type of occupation, and years of education, one can either add or subtract to one's longevity. In the area of life-style it would seem that living in a rural area, being married and using seat belts can add to the years of one's life, whereas being single, living in an urban area and exceeding the speed limit subtracts from one's life-expectancy.

Unfortunately, things like heredity and past family history are predestined and cannot be changed, yet these too add or subtract years.

So, I took the test and must admit I had to fudge a little bit here and there to pick up more pluses than I did minuses. So if all goes well and the river don't rise, they just about guaranteed me to live at least long enough to pay my April 15th taxes.

Go ahead and take the test, it was fun.

MFH

How to Pass the Test of Time

by Mark Jonathan Harris

The following test, though *not* validated, is based on the best scientific evidence available today. While scientists still don't know all of the variables causing long life, they are aware of some of the phenomena that seem to be correlated with longevity. The test is based on that data. The life-expect-

ancy table is taken from the latest census figures; it reflects average life expectancy for the entire United States population. Racial differences do exist: At birth the life expectancy for most nonwhites averages over six years lower, although by 65 it's less than one year lower.

Life-Expectancy Table

| AGE MALE FEMALE | AGE MALE FEMALE | AGE MALE FEMALE | AGE MALE FEMALE | AGE MALE FEMALE |
|-----------------|-----------------|-----------------|-----------------|-----------------|
| 26 70.5 77.3 | 35 71.3 77.7 | 44 72.3 78.4 | 53 74.1 79.6 | 62 76.9 81.4 |
| 27 70.6 77.3 | 36 71.4 77.8 | 45 72.5 78.5 | 54 74.3 79.7 | 63 77.3 81.6 |
| 28 70.7 77.4 | 37 71.5 77.8 | 46 72.6 78.6 | 55 74.6 79.9 | 64 77.7 81.9 |
| 29 70.8 77.4 | 38 71.6 77.9 | 47 72.8 78.7 | 56 74.9 80.1 | 65 78.1 82.2 |
| 30 70.9 77.5 | 39 71.7 78.0 | 48 73.0 78.9 | 57 75.2 80.3 | 66 78.6 82.4 |
| 31 70.9 77.5 | 40 71.8 78.0 | 49 73.2 79.0 | 58 75.5 80.5 | 67 79.0 82.7 |
| 32 71.0 77.5 | 41 71.9 78.1 | 50 73.4 79.1 | 59 75.8 80.7 | 68 79.5 83.0 |
| 33 71.1 77.6 | 42 72.0 78.2 | 51 73.6 79.3 | 60 76.2 80.9 | 69 79.9 83.3 |
| 34 71.2 77.6 | 43 72.2 78.3 | 52 73.8 79.4 | 61 76.5 81.2 | 70 80.4 83.6 |

Find your life expectancy in the table above, based on age and sex. Keep a running score by adding and subtracting years as you answer each of the following questions. The final number is your personalized life expectancy.

Heredity

1. Longevity of parents or grandparents
Add 2 years if 2 of your grandparents lived to age 80 or beyond. If your mother lived to 80 add 1.5 more; if your father reached 80 add 2.

+ _____ - _____

2. Relatives and cardiovascular disease
Subtract 4 if any parent, grandparent, sister, or brother died of a heart attack or stroke before 50. If anyone died of any of the above before 60, subtract 2.

+ _____ - _____

3. Other heritable diseases
Subtract 3 for each incident of diabetes, thyroid disorder, breast cancer (women), digestive-system cancer, asthma, emphysema, or chronic bronchitis in parents or grandparents.

+ _____ - _____

Health and Diet

4. Weight
Subtract 1 per 10 pounds overweight.

+ _____ - _____

5. Smoking
Under a cigarette pack a day, subtract 2; 1 to 2 a day, subtract 4 to 7; 2 or more, subtract 8 to 12.

+ _____ - _____

6. Drinking
For light to moderate drinkers—up to 2 drinks per day—add 3. For heavy drinkers—over 3 drinks per day—subtract 8. Teetotalers subtract 1. Moderate drinking reduces stress and aids digestion. Heavy drinking, however, produces physiological damage. As for teetotalers, they may have rather rigid value systems, and may undergo stress in maintaining them.

+ _____ - _____

7. Exercise
If you exercise moderately—jog, bike-ride, take long walks, or swim 2 or 3 times weekly—add 3. Just exercising on

weekends isn't enough.

+ _____ - _____

8. Sleep

If you sleep 9 hours a day, subtract 4. For more than 10 hours, subtract 6. Adults who sleep that much use too many hours in nonphysical activity, and may be unhappy and sleep as an escape, or they may be ill. Depressed people have shorter life expectancies.

+ _____ - _____

9. Regular physical examinations

Women over 30 who give monthly breast self-examinations and have at least an annual breast examination and Pap smear add 2. Men over 40 who have an annual physical and proctoscopic examination add 2. If cancer is detected early enough, it can be treated and controlled.

+ _____ - _____

Education and Occupation

10. Years of education

Less than high school, subtract 2; 4 years beyond high school, add 1; 5 or more years beyond high school, add 3. School does not make you live longer, but higher education correlates with increased income and opportunity and access to better health care.

+ _____ - _____

11. Type of occupation

If your occupation is in the professional category, add 2—except if you're a musician, architect, or pharmacist, subtract 1. (Why the negative correlation between longevity and these occupations exists is uncertain.) If you work in rugged heavy labor, you risk accidents; subtract 2. Occupations associated with overeating, such as chef or baker, subtract 2.

+ _____ - _____

12. Annual income

If it's over \$40,000 per year, subtract 2. People with higher incomes probably experience more stress earning them and

consume more rich food.

+ _____ - _____

13. Activity on the job

If your job is active—housework, construction work, etc.—add 3. If it's sedentary—office work—subtract 3.

+ _____ - _____

14. Age and work

If you are over 60 and you are still working, add 2.

+ _____ - _____

Life-style

15. Rural vs. urban dwelling

If you live in an urban area, subtract 1. If you live in a rural area, add 1. City dwellers experience more stress.

+ _____ - _____

16. Marital status

If married or living with someone permanently, add 3. If single, subtract 1 for each unwedded decade past age 25. Married people live longer.

+ _____ - _____

17. Personality type

If you are a calm, passive person, add 1 to 3. If you're aggressive, intense, a competitive, subtract 1 to 5—you are prone to cardiovascular disease.

+ _____ - _____

18. Risk-taking—auto accidents

If you use your car's seat belts regularly and follow speed limits, add 1. Auto accidents are among the top 10 killers.

+ _____ - _____

19. Happiness

If you are basically content with life, add 1 to 2. If you're unhappy—worried, tense, and guilty—subtract 1 to 3.

+ _____ - _____

Test designed by Dr. Diana S. Woodruff, Temple University, as adapted from "Will You Live to Be 100?" by Judith Bentley, *Fan Health*, January, 1975.

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**There are only five major national
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*Copies of this study and PUREPAC's annual report are available upon request.

Letters to the Editor

Dear Editor:

Here are some thoughts I had about the Special Meeting of the KMA House of Delegates on February 10, 1977:

(1) Everyone present admitted to inequitable distribution of fees to physicians for like services. (2) Everyone present admitted that Medicare recipients did not receive equal credit because of area designations and not eligibility. (3) Everyone seemed to ignore the source of the money distributed to physicians and that is via taxation filtered through Washington to a Third Party (Metropolitan) and thence to physicians. (4) It was proposed by some present that Area III designated physicians raise fees. They forgot that there is only a finite amount of money to distribute, and if some fees were raised others would have to be lowered, if not now, certainly later. (5) Some acted selfishly (in my opinion) to protect their own pocketbooks, rather than to act democratically to right wrongs which have existed for nearly ten years. (6) Some delegates were influenced by diversionary tactics of suggesting usual and customary fees. This is a Utopian concept, but is impossible as long as there is a Third Party Intermediary.

I have tried to omit thoughts of: Metropolitan secret-ing information as how to raise fee schedules; dual sets of figures given to different groups requesting information; forcing physicians to submit and resubmit forms and wait months to get fees justly deserved; physician distribution problems due to area designation; thoughts of the special session (lame duck) to reconsider the regular meeting vote; and the neglect of implementing the September decision.

I commend Doctor Carl Cooper for his calm and just chairmanship. It will be interesting to see what happens next September and I hope to be there.

Robert L. McKenney, M.D.
Delegate, Pendleton County
Doctors Building
Falmouth, Kentucky

(The following letter was written in response to the points raised in the previous correspondence.)

Dear Editor:

I was privileged to see the recent letter from Robert L. McKenney, M.D., of Falmouth, concerning the Special Session of the House of Delegates on February 10. I think it is very important that the forum *The KMA Journal* provides is available to the membership and was pleased that Doctor McKenney made use of it.

Doctor McKenney has made some thoughtful observations but, with no intent to editorialize what he has said, I would like to provide clarification on the following points: (A) The Metropolitan-Medicare Office has been quite cooperative in all discussions relating to Medicare fees. In my opinion their representatives were not implying methods for raising fees as such, but were responding to questions of how fees are determined and, along this related line, how fees could be changed. KMA

traditionally has been opposed to fee schedules, but in favor of the usual, customary, and reasonable fee concept, so any discussion of fee schedules associated with the meeting was probably not germane. (B) Doctor McKenney indicates that dual sets of figures were given to different groups by Metropolitan relating to physicians' fees. I may have misinterpreted Doctor McKenney's intent, but would point out that the three sets of figures used represented different time periods during which physicians' fees, reimbursed by the Medicare program, were calculated. One set of figures was given to the KMA Committee on Medicare and Other Governmental Programs in early 1976. Another set was developed for presentation at the regular September House of Delegates session, and the third was developed for the Board of Trustees at its meeting in December 1976. I sincerely do not feel this was any attempt on the part of the Metropolitan-Medicare Office at confusion but rather was an effort on their part to provide KMA with the latest fee information they had available at the different times it was requested. (C) At the risk of being redundant, I would reiterate my comments made during the Special Session that the Board was, in fact, compelled to convene the House in view of new interpretations of the Medicare data which was felt to have an effect on the September House of Delegates decision. The Board felt that the Delegates should have that information and with it provide continuing direction of Association policy. (D) During the Special Session and in letters sent to the membership by Doctor Holloway, Chairman of the Board of Trustees, and me, it was pointed out that the decision made by the House of Delegates in September was transmitted to the Metropolitan-Medicare Office in October, but that Metropolitan could not begin implementing that policy until March 1977 providing the Bureau of Health Insurance approved. According to information available to the Board, this was because fee modifications or updates can be made, by law, beginning only at the beginning of each fiscal year.

I hope these comments are helpful.

Paul J. Parks, M.D.
KMA President
1109 State Street
Bowling Green, Kentucky

Dear Editor:

This is in response to some questions raised by Doctor Ronald Walldridge in a Letter to the Editor which appeared in the March issue of *The Journal of KMA*.

Question #1:

KEMPAC tries to compile voting records on major medical legislation that is voted on in Frankfort. It also obtains from AMPAC the voting records on U.S. Congressmen. This information, which is available to any KEMPAC member, is used to decide whether to honor a request for support for a particular candidate. When there were 59 pieces of legislation that the KMA Legislative Committee considered in 1976, you can see the

difficulty in compiling voting records on 118 legislators. KMA was successful in 53 of these 59 issues.

Question #2:

When two candidates are supported, it is because we have requests from both physician support committees and the Board feels that both candidates are pro-medicine. If this has occurred in the past, I can assure you that has been a rare occurrence in the past couple of years. This past year the KEMPAC Board denied a physician support committee request for congressional support because the candidate had not been a friend of medicine in Washington.

Question #3:

The KEMPAC Board is equally composed of members from the two major political parties and are appointed by the KMA Board of Trustees. In my term spent on the Board I feel that medicine's interest has always been the dominant factor in decisions. That is not to say that each individual is not party-oriented and they should be. However, it is the Board's place to decide what is best for medicine. I have heard this complaint from Republicans and Democrats both so you can see that there is a difference of opinion.

I would like to thank Doctor Waldrige for his letter and concern.

Donald C. Barton, M.D.
KEMPAC Board Chairman
Doctors Park
Corbin, Kentucky

The Letters To The Editor column is a means for the KMA physicians to express their opinions and viewpoints on varied topics. If you have an item you would like brought before your fellow practitioners, please submit it to Letters To The Editor, Kentucky Medical Association, 3532 Ephraim McDowell Dr., Louisville, Kentucky 40205. Communications should not exceed 250 words. The right to abstract or edit is reserved by the editors of *The Journal*. Names will be withheld upon request, but anonymous letters will not be accepted.

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Digest* of Proceedings of the Special Session of the HOUSE OF DELEGATES

Ramada Inn, Bluegrass Convention Center, Louisville, Kentucky, February 10, 1977

Carl Cooper, Jr., M.D., Bedford
Speaker of the House, Presiding

Speaker Cooper called the House of Delegates to order in special session at 1:10 p.m., and asked Harold L. Bushey, M.D., Barbourville, to give the Invocation. He then called on David L. Stewart, M.D., Louisville, Chairman of the Credentials Committee, to give the report of the Credentials Committee. Doctor Stewart reported that a quorum was present.

Doctor Cooper appointed Tellers for the special session as follows: Branham B. Baughman, M.D., Frankfort, Chairman; James A. Baumgarten, M.D., Owensboro; and Richard F. Hench, M.D., Lexington.

The Speaker then called on James B. Holloway, Jr., M.D., Lexington, to give a report of the Board of Trustees. Board Chairman Holloway reported that the KMA Executive Committee has authorized the American Express Company to put together a travel package with post-convention tour options available for those planning to attend the 1977 AMA Annual Meeting in San Francisco, June 18-22. He also reported that a study is being made to determine the feasibility of scheduling the Wednesday evening sessions of the House of Delegates at an earlier hour during KMA's Annual Meetings.

Doctor Cooper read a statement regarding protocol observed during the House of Delegates' sessions, following which Doctor Bennett Crowder made a motion that the House suspend the rules of this body requiring furnishing of copies of Resolutions to the Headquarters Office seven days in advance of the session, and further moved suspension of the rules requiring Reference Committee action. The motion was seconded by Doctor Jerry Fraim. The House was advised that this motion required a 2/3 majority vote to pass. On a call for the vote, the motion carried.

Doctor Cooper then introduced Mr. Ben Sciantarelli, Manager, Medicare Office, Metropolitan Life; and Mr. Steve Abramson, Assistant Vice

President, Metropolitan Life, who were seated at the head table to answer questions of the House members.

The Speaker then called on Paul J. Parks, M.D., Bowling Green, for the Report of the President. (Doctor Parks' address is printed in its entirety as follows:

Report of the President

Thank you, Doctor Cooper, and thank you all for coming. I appreciate the opportunity to preface the general discussions and would like to explain to you why I, and the Board of Trustees, felt that this meeting was necessary. I think you will all recall our discussions of Medicare reimbursement levels at the September House of Delegates meeting. Since that time, the Board has given considerable attention to this topic, both individually and collectively. At its December meeting, Mr. Sciantarelli, who is the Manager of the Metropolitan Medicare Office, and Mr. Abramson, who is the Assistant Vice President of Metropolitan responsible for the Medicare offices, were present and explained what effect a single prevailing fee would have on Medicare reimbursement. Officers and staff have held subsequent meetings to review this step and try to project its implications if implemented.

Leadership

We have had many letters—some rather strong, some pro, some con, some strongly supporting the Officers of KMA, others nearly engaging in name-calling, even to the point of calling for a change in Officers—because the Officers and Board, according to them, had not put into action the House policy established last September on Medicare reimbursement. Some thought it an insult to call this House back into session when the House had already spoken. But as additional information was made available, we felt that the House deserved the opportunity to review the same information and draw its own conclusions.

The facts are, though, that the Board has **not** been derelict in its duties. To the contrary, if the September House action went into effect in July without your reconvening, you might well have then been justifiably angered. If nothing else, this meeting is a precautionary move, and the Board is exercising preventive medicine to sustain itself. Why? These are the facts in brief:

1. The House set a policy in September, 1976.
2. The Executive Committee, acting for the Board, immediately transmitted that action as official KMA

**Editorial Note: A tape recording was made of the special session of the House of Delegates, and any member who desires to examine the transcript of these proceedings may visit the Headquarters Office and listen to the recording.*

policy to the Metropolitan Life Insurance Co., who administers Medicare.

3. Metropolitan said no change could be made until July 1, 1977, as directed by federal regulations, and no process to effect the change would begin until March, 1977, if the Bureau of Health Insurance approves of it.

4. KMA then requested Metropolitan to project some figures for the Board of what results this change might bring. An explanation of these figures provided a completely different meaning than the Board members understood when the House made its decision, and, therefore, the Board felt members of the House could possibly have been similarly confused.

5. Once a change is put into effect, it would be nearly impossible to change it back.

6. This House meeting, therefore, does not slow up in any way any changes to be made. There was no way Metropolitan could begin any changing between September, 1976, and March, 1977, no matter how hard we pressed.

7. This meeting was then called by the Board to be safe—to allow you to consider the latest information—and to reaffirm your position or change it if you felt it was indicated.

8. Your President, President-Elect, Board Chairman, and Speaker of the House felt obligated to meet with Metropolitan officials and try to understand this complicated problem the best we could. Doctor Grady Stumbo presented the motion passed by the House last September, which reads, "Resolved, that the KMA House of Delegates direct the KMA Board of Trustees to ask the Medicare Intermediary in the Commonwealth to seek a single state classification for physician reimbursement." Because he authored the motion, we were hopeful he could meet with us, so he was invited, and we were pleased that he was in attendance at a meeting at the Metropolitan Office in Lexington, on January 6.

So . . .

1. The Board has not been delinquent in implementing your action. That new policy was transmitted last year as the official policy of KMA.

2. I do not feel the Board can be criticized, as some have, for calling this meeting, but justifiably could be if it had not been called because:

a. Only now—a month from now, in fact—will Metropolitan begin assimilating data to initiate any changes in its current procedures if the government approves, and

b. This House is being given its just right of saying, "Let's get on with it" or "Let's make some changes in view of additional information we have received."

One thing is for sure. Everyone in this room wants just and fair Medicare reimbursement for every Kentucky physician for services rendered, regardless of where he practices. The thing we haven't agreed on is how best to bring this about.

Background and Explanation of Medicare Information

For purposes of discussion, let me briefly summarize the events that brought us to our meeting today. Acting at the direction of the 1975 House of Delegates, our

Committee on Medicare and Other Governmental Medical Services undertook a study of Medicare reimbursement procedures to see if there was any way that reimbursement could generally be raised to realistic levels, with particular emphasis on rural physicians. Their study resulted in the recommendation to the September House of Delegates that the Medicare intermediary be requested to establish a payment mechanism calculated on the basis of all fees in the state. From the information supplied to the Committee and also to the House of Delegates, it appeared that payment levels would be reduced for physicians in Area I, Louisville and Lexington; would generally remain at the same level for physicians in Area II, in such towns as Bowling Green, Paducah, Owensboro, Somerset, and Ashland, and so forth; and would be increased for physicians in Area III.

While routinely reviewing House of Delegates actions for purposes of implementation, we began to question whether the payments actually made to physicians would take place as the fee material indicated, and our Board of Trustees meeting with Mr. Sciantarelli seemed to confirm that they would not.

The basis for our opinion lies in the Medicare definitions of physicians' charges, and I would like to take just a moment to explain these to you. I believe you all have a copy of the explanation sheet. Medicare uses three different definitions for physicians' charges.

"Customary Charge"—Medicare's definition of a customary charge is one that is the median of the actual charges made by each physician performing a given service in a calendar year. It's not an average of all fees, but it's that fee where 50% of all charges for the services are above it and 50% are below it.

"Prevailing Charge"—The prevailing charge for a service is the 75th percentile of customary charges for all physicians, weighted by the number of times the service is performed. The prevailing charge is limited to prevailing charges of 1971, plus increases based on a national economic index that is figured each year. In other words, if all charges for a given service were put together, and the amount most often charged was determined, 75% of that figure or below would constitute the prevailing charge, taking into consideration the total number of times it was performed.

"Actual Charge"—Medicare defines an actual charge as the full fee a physician charges for a service, regardless of whether it is being paid by a private patient or a third party payor.

To recap, Medicare recognizes three different types of physician charges. A customary charge, which is the median of all actual charges; a prevailing charge, which is 75% of weighted customary charges; and the fee actually charged by the attending physician.

Next to the Medicare definitions on the sheet you were given are explanations of usual, customary and reasonable charges that were reaffirmed as KMA policy by the House of Delegates in 1972, for comparison.

The most important fact to consider in discussing these three charges, and the reason we felt this meeting should be convened, is that by law Medicare must pay the lowest of the customary, prevailing or actual charges submitted, regardless of the payment area.

There are other related issues that become involved, such as the time period from which payment levels are

determined, as well as the disallowances made by the Medicare program and the "co-insurance" or deductible that must be paid by the patient. But these matters are details that aren't really pertinent at this point.

I would now like for you to look at the handout marked with the Roman numeral III that was supplied to us by the Metropolitan Office. The data listed shows the prevailing or median of fees for procedures by physicians in Areas I, II, and III, and for three physician groups, A, B, and C. In each area, for each physician group, there are also listed the prevailing, again prevailing, fees as calculated on a single statewide area.

Physician group A consists of general practice, anesthesiology, and miscellaneous specialties; physician group B is generally the medical specialties; and Group C is the surgical specialties.

Board Interpretation of Medicare Fee Information

To reiterate, the data in front of you is for prevailing fees and by law Medicare must pay the lowest of customary, prevailing or actual charges submitted. If fees are calculated on a statewide basis, as you can see, the prevailing fees will be lowered for Area I, will probably decrease slightly for Area II, and will be raised for Area III, but the actual payment made by the Program will not necessarily be increased for Area III. A physician in Area III could receive the prevailing fees listed only if his customary charges were the same or higher in 1975 for each of the individual procedures.

If they were not, he will continue to receive what he has routinely been paid by Medicare. The next update for Medicare customary payments will not take place until charges have been figured for calendar year 1976, to be paid in fiscal year 1977. Even then, higher payments won't be given to physicians unless: (1) actual charges submitted are higher or the same as the prevailing charge, and (2) a majority of all other physicians' fees are higher or equal to the prevailing charge. Historically, experience has indicated it to be unlikely that most doctors will do either of the two.

As an example, look at the fourth procedure listed, 9020, initial hospital visit. The figures show the prevailing fee, or 75% of the weighted customary charges for Area I, was \$25.50; for Area II, \$19.10; and for Area III, \$19.10. The column to the right shows that the prevailing fee for all physicians, regardless of area, would be \$20.92.

The sum of \$20.92 represents a maximum amount that can be paid to any physician, but this has no effect on the minimum amount. The reason for this is that 75% of the weighted customary charges will be equal to or less than the prevailing charge. It is therefore most likely that many Area III physicians would continue to be reimbursed at their present levels, even though the prevailing fee is higher. Area II would continue to be reimbursed at the present level for this procedure, and reimbursement to Area I physicians would be reduced by some \$5.00.

To reiterate the Board's interpretation, the maximum amount allowed would be determined on charges of all physicians in the state, but the amount actually paid to the majority of physicians would continue to be based on

the charges submitted during 1976, until the next update—or in about 18 months.

To move away from specifics, we had questions about what some of the broader effects of a single state prevailing fee might be, and Medicare projected that the most obvious one would be that Medicare will spend less money in the state to reimburse physicians. Other examples were cited, such as, that for all routine followup office visits, code number 9004, Medicare would have paid roughly \$100,000 less in the state if a single state prevailing fee had been adopted, and roughly \$100,000 less would have been spent for a routine followup hospital visit. I am sure that other similar information is available to us if necessary.

Conclusions

We learned that whether the Medicare Office adopts a single state fee system or not, the changeover process cannot begin until March, to go into effect July 1, so the fact that this second House session is considering the matter will not have any effect on the starting date, if the new system is adopted.

The conclusions that we drew from this material were that if the payment mechanism to physicians remains the same, the only way that all physicians in any of the three areas can change their reimbursement levels is to change the amount they bill Medicare. If a single state fee mechanism is adopted, the statewide charges will be calculated for prevailing fees, but will have little effect on customary or actual charges. What a physician will receive will be based on whatever the state prevailing fee is until all physicians, as individuals, change their charges. So, the total amount paid by Medicare in the state will be less.

Because less money will be spent by Medicare, Medicare patients, collectively, will be required to spend more out of pocket for medical services. In spite of the shortcomings of the Medicare program experienced by physicians, the real monetary inequities are most felt by the program's elderly recipients. If our interpretations are correct and Area I physicians receive less and Area II and III doctors receive the same payments, Area I patients will ultimately make up the million dollars less spent by the program.

The fact that standardized fee information is being calculated may set a potentially dangerous precedent for more restrictive fee setting by the federal government, particularly in view of pending National Health Insurance.

This, and all states, are subject to Medicare law for payment purposes, but by law physicians are not required to participate in the program. It would be very disturbing to me, as your President, if this Association adopted a binding policy concerning payment for medical services just to satisfy the requirements of one program. As you know, KMA has traditionally supported the usual, customary and reasonable fee concept. One of the reasons for adopting this as policy is that it relates solely to the financial value of a physician's services and not the source of payment.

Alternatives

After we came to the conclusion that a prevailing fee schedule would not solve our problem and would, in

fact, compound it, the Board felt an obligation to try and find some reasonable alternatives to present you today. Contact with the AMA Washington Office indicated that Congress will devote a great deal of attention this session to Medicare and Medicaid reforms and there was some encouragement in the fact that both Congress and the government have recognized the acute rural physician shortage problem. This is an avenue that we feel should be probed further. Exploration of this possibility is certainly not new, but indications are that this particular Congress is probably more concerned with rural health problems than the previous ones.

Congressional reform of the Medicare and Medicaid laws that would be beneficial to doctors may be suspect, but experience with these laws and the expressions of dissatisfaction with them from the public are a tremendous incentive for modification by the Congress and government, and I hope that we might be instrumental in effecting such modification. This was confirmed in remarks by Senator Herman Talmadge of Georgia, a major proponent of Medicare reform, at the AMA Leadership Conference on January 22, which was attended by some of your Officers.

Another alternative to a single statewide prevailing fee mechanism, as I alluded to earlier, for the Area III physicians, would be to encourage all Area III doctors to change their fees to reflect the cost of doing business in 1977. To this end, Mr. Sciantarelli has offered to have representatives from his office travel around the state to meet with groups and explain how Medicare payments are determined.

I haven't mentioned the effect that a statewide system would have on fees paid by the Medicaid program and won't dwell on it at this point. I would point out, however, that our interpretation is that Medicare fees would generally be reduced for all physicians, as I have mentioned. Because Medicaid payments are 62% of the allowable Medicare rates, the obvious result is that Medicaid payments would be further reduced, and we are all fully aware of payment problems we have experienced with that program.

Summary

In summary, I would like to reiterate that the Board of Trustees has purposely taken no position on this issue because of our conviction that further discussion by the House was vital, and the purpose of this meeting today is for the House to provide continuing direction to the Board. The only personal request I would make of you is that you keep in mind that whatever position we adopt, our patients will be the ones most affected. This representative body must do what is best for those patients, as well as the entire KMA membership.

I would like to also personally thank Mr. Sciantarelli and Mr. Abramson for the many hours they have spent working on this problem with us and for their ungrudging cooperation. Their assistance has been extremely helpful.

Finally, I would urge you in our discussions today to avoid talking about individual incidents. We all know of them, but I don't think they will serve any useful purpose here. I would by no means want to limit discussion, but I hope we can keep our remarks to the point.

I appreciate your attention.

The Speaker thanked the President for his remarks; noted that handout sheets prepared by the Metropolitan representatives had been distributed; and then opened the floor for comments by Mr. Sciantarelli and Mr. Abramson, with a question and answer period to follow.

Approximately three hours of questions, answers, and general discussion then took place with everyone present having an opportunity to express his personal opinions on the issue being considered.

N. H. Talley, M.D., Delegate from the Pennyryle Medical Society, was then recognized and introduced the following Resolution, which was seconded from the floor.

RESOLVED, KMA and this House of Delegates reaffirm our long-standing position that reimbursement be based on **current** UCR fees upgraded annually on a UCR basis. Further,

BE IT RESOLVED, disputed fees will be subject to peer review with both parties mandated to abide by the decision with appropriate appeals open to both parties, and

BE IT FURTHER RESOLVED, this House of Delegates emphatically supports the concept of **no** designated area, and

BE IT FURTHER RESOLVED, the Association notify the carrier this is the unified position of the Association and request implementation by July, 1977.

BE IT FURTHER RESOLVED, that should the carrier fail to implement the above resolution, the KMA request members of Congress to begin an open investigation of the carrier on behalf of the elderly of the Commonwealth of Kentucky and, lastly,

BE IT RESOLVED, if the carrier will not support our UCR concept, then let us, unified, work to replace the carrier and, as a last resort, let us individually take such further steps as we may feel to be appropriate and necessary.

During debate on the Resolution, it was pointed out that the first matter at hand was for the House to reaffirm or rescind its action taken in September, 1976, and that this should be accomplished before other Resolutions were introduced.

Doctor Wyatt Norvell, Henry County, was then recognized and made a motion, following advice given the House by Legal Counsel, that Doctor Talley's Resolution be "postponed definitely" until the motion passed in September could be reconsidered. Doctor Norvell's motion was seconded and carried.

Doctor Norvell then made another motion that the House reaffirm or rescind its decision made in September. The motion was seconded and carried.

Doctor W. Grady Stumbo, Knott County, was

recognized and moved that the House of Delegates act to reaffirm its position taken in September, 1976, "... *that the KMA House of Delegates direct the KMA Board of Trustees to ask the Medicare Intermediary in the Commonwealth to seek a single State Classification for physician reimbursement.*" The motion was seconded.

Doctor Dwight Blackburn, member of the KMA Board of Trustees, was then recognized by the Chair, and called for the question. A second was heard from the floor with no dissension voiced.

A standing vote was taken on the motion made by Doctor Stumbo, and it was defeated by a vote of 73 to 62.

Speaker Cooper stated the House would turn its attention to the Resolution made earlier by Doctor Talley which had been "postponed definitely." The Resolution was re-read, and on a call for the vote, was passed.

There being no further business relating to Medicare to come before the House of Delegates, Doctor Cooper thanked the members for their attendance, and adjourned the special session of the House at 4:30 p.m.

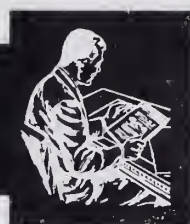
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MATERNAL MORTALITY



This 16-year-old, single, black, Gravida 1, Para 0, was admitted to a 380-bed general hospital at 2:20 p.m. on September 10, 1974. She had been seen in a private physician's office for the first time the day of admission. The chief complaint was dyspnea. Respirations were rapid—42 per minute and she was cyanotic with slight clubbing of her fingers. She was pregnant approximately 12 weeks. There was a two-week history of left pleuritic pain with some hemoptysis. On admission BP was 118/84, pulse 100, and respirations as stated, 42. There were some questionable rhonchi in the left lower base. Neck veins were flat and there was no deviation of the trachea. Heart rate was regular. There was a fourth heart sound noted with splitting of the second sound, prominence of the second sound, no murmurs noted. The abdomen was normal.

Initial impression was pulmonary embolus. However underlying congenital heart defect with reversal of left to right flow as in Eisenmenger's Syndrome was entertained. She was seen in consultation by a cardiologist who was able to elicit no past history of heart disease. She had no previous diagnosis of heart disease, and had a normal cardiogram. EKG at this time showed right ventricular hypertrophy. Pulmonary scan showed bilateral pulmonary emboli. Impression of the cardiologist was pulmonary embolus with acute pulmonary hypertension and acute right ventricular hypertrophy. It was felt that heparinization was indicated. Stat SMA 12 and blood count were ordered. Glucose was normal, urea 74, urea nitrogen 8, sodium 138, potassium 4.2, chlorides 108 and CO_2 2. The fibrin split products were negative. Sick cell prep was negative. SMA 12 was normal. Bilirubin was 1.25. She was moved to CCU, started on Heparin 5,000 units IV every 4 hours. She was expectorating some blood and was getting oxygen at 7 liters a minute by mask, BP 110/70, pulse 90, respirations 20. She vomited some on the 12th and was very apprehensive in appearance, eating poorly and nauseated. She took some fluids later in the afternoon but was

still complaining of nausea. She became more unresponsive. Respirations were slowing and she was placed on a respirator and fibrillation noticed. Code 300 was called at 6:55 and she was pronounced dead at 7:19. An autopsy was performed.

Final anatomical diagnoses: 1) idiopathic pulmonary hemosiderosis; 2) left retroperitoneal hematoma; 3) aspiration; and 4) intrauterine pregnancy.

Note from Pathologist Report: This is the second case I have seen at autopsy of a 16-year-old black female without previous complaints who rapidly expired from a pulmonary problem that was not diagnosed until autopsy.

The diagnosis is made at autopsy by finding widespread pulmonary hemorrhages and evidence of previous pulmonary hemorrhage in the form of hemosiderin. In retrospect, the patient's severe hypoxia is compatible with hemosiderosis. Although these patients are said to cough up bloody and rusty sputum, that was not the case in the first patient I saw nor apparently the case with this patient. It would be interesting in this patient, in view of the autopsy diagnoses, to attempt to establish previous episodes of cough, dyspnea, and hemoptysis. (Goodpasture's Syndrome is excluded by the absence of kidney disease.)

The Committee on Maternal Mortality classified this as an indirect obstetrical death with questionable preventable factors. The questionable factor being the use of Heparin, but it was discussed that in such a picture the Heparin would seem to be indicated. This is a very unusual case and it is felt valuable to present this in this report since deaths from pulmonary disease such as pulmonary fibrosis have to come to the attention of the Committee as similar to the presented case herein. It is truly amazing that she was not more symptomatic by history and that this pulmonary problem appeared very early in pregnancy when it would seem that the pregnancy would have little effect on the cardiovascular pulmonary system.



RECENT CHANGES

federal register

**Providing
Drug Information
to Physicians**

**Informational
Bulletin #433-76**

**National
Health
Insurance**

**special report
Malpractice
insurance:**

**drug
bulletin**

**Health care doesn't
need more red tape**

**Drug firms challenge
'MAC' rules**

**Drug
Substitution**

**The Continuing Demonstration
of Health Progress
RESEARCH**

Malgram 2

THERE ARE A LOT OF PEOPLE GETTING BETWEEN YOU AND YOUR PATIENT.

Medicine today is in the spotlight, subjected to all kinds of scrutiny. Your control over patient therapy is being monitored, judged and occasionally abrogated, sometimes by unknown third parties.

The worry is that in the wake of this focus, the relationship between you and your patient will be weakened, without offsetting benefits. Consider three examples:

Drug substitution In most states, pharmacy laws, regulations or professional custom stipulate that your non-generic prescriptions be filled with the precise product you prescribe. But in the last five years, a dozen or more State laws have been changed, permitting the pharmacist in most cases to select a product of the same generic drug to fill any prescription.

Ironically, this dilution of physician control has taken place against a background of growing evidence that purportedly equivalent drug products may be inequivalent, since neither present drug standards nor their enforcement are optimal. In fact, the FDA itself says it has not enforced the same standards for hundreds of "low-on" products that it had applied to the original FDA approvals. Thus physician control over patient therapy is being eroded with a risk that patients may be exposed to drugs of uncertain quality.

The major advertised claim for substitution is reduced prescription prices for consumers. Yet no documentation of any significant savings has been produced.

MAC Maximum Allowable Cost, MAC for short, is a federal regulation designed to cut the Government's drug bill by setting price ceilings for drugs dispensed to Medicare and Medicaid patients. Unless the prescriber certifies on the prescription that a particular product is medically necessary, the Government intends to pay only the cost of the lowest-priced, purportedly-equivalent,

generally-available product. The effect of the program may be that elderly and indigent patients will be restricted to products which someone in Washington believes are priced right. Practicing doctors will have little to say about administration of the program, since Government will have absolute authority to make its choices stick.

The drug lag The future of drug and device research depends upon a scientific and regulatory environment that encourages therapeutic innovations. The American pharmaceutical industry annually is spending more than \$1 billion of its own funds and evaluating more than 1,200 investigational compounds in clinical research. Disease targets include cancer, atherosclerosis, viruses and central nervous system disorders, among others. But there is a major barrier to the flow of new drugs to your patients: The cost of the research is more than ten times what it was, per product, in 1962; and whereas governmental clearance of new drug applications took six months then, it commonly consumes two years now.

The FDA needs adequate time, of course, to consider data. But it is equally clear that the present approval process contributes to needless delay of needed therapy. That's why the increased efficiency of the drug approval process is vital to all our futures.

If these issues concern you, we suggest that you make your voice heard—among your colleagues and your representatives in State legislatures and in Washington.

It could make a difference in your practice tomorrow.



Pharmaceutical Manufacturers Association
1155 Fifteenth Street, N.W., Washington, D.C. 20005



ASSOCIATIONAL NEWS



7th Emergency Care Seminar To Focus on Trauma, CPR

The Seventh Emergency Medical Care Seminar, set for May 25-26 at the Ramada Inn/Bluegrass Convention Center in Louisville, will focus on the latest developments in emergency medical care to include presentations dealing primarily with trauma and medical emergencies.

Highlighting the two-day meeting will be the cardiopulmonary resuscitation certification course sponsored by the American National Red Cross. This course will be given on Wednesday and Thursday afternoons, May 25 and 26, with a CPR recertification course offered on Thursday for those previously certified by the Red Cross in CPR.

George R. Gay, M.D., Mendocino, California, will be the featured luncheon speaker on May 26. Assistant Clinical Professor of Family Practice at the University of California at Davis, Doctor Gay will speak on "The Treatment of Cocaine and Overdoses of Other Cardiac-Stimulatory Agents." A member of numerous editorial boards and author of over 135 publications and films, Doctor Gay practices emergency medicine and toxicology and has done extensive work on drug abuse.

Specialty groups, such as EMT's, nurses, dentists, emergency physicians, and industrial nurses, will also hold individual sessions on the afternoon of May 25.

Accreditation has been received from the American Medical Association, the Kentucky Academy of Family Physicians, National Registry of Emergency Medical Technicians, and the Kentucky Dental Association. CME credit has been applied for from the American College of Emergency Physicians and the Emergency Department Nurses Association.

There is a \$15 registration fee for each day and pre-registration can be made by contacting the Kentucky Medical Association.

A program outline for the annual seminar follows:

1977 Emergency Medical Care Seminar Program Outline

WEDNESDAY, MAY 25
Morning Session

Opening Ceremonies

"Initial Evaluation of Trauma Victim"—John Stansberry, M.D., Paris

"Fluid Resuscitation of the Multiple Trauma Victim"—E. Truman Mays, M.D., Somerset

"Immediate Management of Chest Injuries"—Gerald B. Reams, M.D., Ashland

"Head and Spinal Cord Injuries"—Lawrence Drury, M.D., Louisville

"Pre-Hospital Care of the Trauma Victim"—Jim Shewmaker, Louisville

"Dental Emergencies"—J. Bernard Poindexter, D.M.D., Ashland

Panel Discussion

Luncheon

Afternoon Session

CPR Certification Course

Specialty Group Sessions

THURSDAY, MAY 26

Morning Session

"Management of the Acute Respiratory Distress in the Emergency Department"—Ballard Wright, M.D., Lexington

"Recognition and Treatment of Cardiac Arrhythmias in the Emergency Department"—Terry Henkel, M.D., Louisville

"Pharmacology of the Crash Cart"—Daniel E. McMartin, M.D., Louisville

"Psychiatric Emergencies"—David McNeely, M.D., Louisville

"Pediatric Emergencies and Resuscitation Efforts"—Mary A. Smith, M.D., Louisville

"Infectious Diseases"—Martin J. Raff, M.D., Louisville
Luncheon

Afternoon Session

Film on "Rape"—George R. Braen, M.D., Lexington

CPR Certification Course

CPR Recertification Course

KMA To Sponsor Workshops On Financial Control

Three regional workshops on "Financial Control of Your Medical Practice," are being sponsored by the Kentucky Medical Association under the leadership of Conomikes Associates, professional medical practice management consultants.

The half-day sessions will be held as follows:

May 17—Hyatt Regency Hotel, Lexington

May 18—Ramada Inn-Hurstbourne Lane, Louisville

May 19—Kenlake Resort Park, Hardin

The Financial Control Workshops will deal primarily with better financial controls and better billing and collection techniques for the practicing physician. Registration for the session, which is limited to 35 physicians, can be made by contacting the Kentucky Medical Association. There is a \$62.50 fee.

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$\frac{20}{100}$

E A R

$\frac{20}{70}$

I N G I S

A S P R E C I O U S

A S S I G H T H A V E

Y O U H A D Y O U R H E A R I N G

T E S T E D L A T E L Y A S I M P L Y

C O M F O R T A B L E H E A R I N G

I N V E S T M E N T O F A F E W M I N U T E S

Hearing losses are among the most consistently neglected health problems. Many people with them won't even admit it to themselves, let alone others. A little encouragement may start them thinking about themselves more realistically.

That's why we're offering you the poster shown here. You can hang it on the wall or stand it on a small table. It comes with booklets called "As precious as sight" that give your patients some basic facts about auditory testing and hearing losses and how easy they are to correct in many cases.

Write to us for your free poster and booklets. They just might help you to help some patients who aren't hearing as well as they used to. Even those who ordinarily wouldn't hear of it.

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Beltone
WHEN A HEARING
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London

When choosing a diuretic for day-in-day-out hypertension control with comfortable compliance...

The agent you choose in mild to moderate essential hypertension should offer (1) long-term effectiveness, (2) patient comfort and compliance.

Zaroxolyn offers both.

In one long-term study¹ Zaroxolyn brought moderately elevated (average 161/109 mm Hg) blood pressure down to the range of normotension—and held it there for a year or more.

The investigator noted, "Patient cooperation was surprisingly good for a study of such duration [years]. The once-daily dosage schedule with

metolazone [Zaroxolyn] no doubt contributed to patient compliance."

Overall compliance with Zaroxolyn is good—very good. An analysis of controlled clinical studies involving 188 Zaroxolyn patients showed that only eight discontinued therapy because of side effects. That's a discontinuation rate of only 4.3%, and broader clinical experience appears to substantiate this low rate²

Zaroxolyn. For long-term control and comfortable compliance in mild to moderate hypertension.

Recommended initial dosage in mild to moderate essential hypertension—2½ to 5 mg once daily

Zaroxolyn®

(metolazone, Pennwalt)

2½-mg, 5-mg and 10-mg tablets

once-daily antihypertensive diuretic

For prescribing, see complete prescribing information in the package insert, or in PDR, or file from your Pennwalt representative. The following is a brief summary. **Indications:** Zaroxolyn (metolazone) is an antihypertensive indicated for the management of mild to moderate essential hypertension as sole therapeutic agent and in the more severe forms of hypertension in conjunction with other antihypertensive agents. Also, edema associated with heart failure and renal disease. **Contraindications:** Hypertension, hepatic coma or precoma, allergy or sensitivity to Zaroxolyn. Or, as a routine in otherwise healthy pregnant women. **Warnings:** In patients with cross-allergy may occur in patients sensitive to sulfonamide-derived drugs, thiazides and metolazone. Hypokalemia may occur, and is a particular hazard in digitalized patients; hypokalemia or fatal arrhythmias may occur. Hypokalemia and hyperuricemia may be noted or aggravated. Considerable potentiation may occur when given concurrently with furosemide. Use with potassium-sparing diuretics should be avoided. Use with potassium-retention and hyperkalemia. Administration to women of childbearing

age requires that potential benefits be weighed against possible hazards to the fetus. Zaroxolyn appears in the breast milk. Not for pediatric use. **Precautions:** Perform periodic examination of serum electrolytes, BUN, uric acid, and glucose. Observe patients for signs of fluid or electrolyte imbalance. These determinations are particularly important when there is excessive vomiting or diarrhea, or when parenteral fluids are administered. Patients treated with diuretics or corticosteroids are susceptible to potassium depletion. Caution should be observed when administering to patients with gout or hyperuricemia or those with severely impaired renal function. Hyperglycemia and glycosuria may occur in latent diabetes. Chloride deficit and hypochloremic alkalosis may occur. Orthostatic hypotension may occur. Dilutional hyponatremia may occur in edematous patients in hot weather. **Adverse Reactions:** Constipation, nausea, vomiting, anorexia, diarrhea, bloating, epigastric distress, intrahepatic cholestatic jaundice, hepatitis, syncope, dizziness, drowsiness, vertigo, headache, orthostatic hypotension, excessive volume depletion, hemoconcentration, venous thrombosis, palpitation, chest pain, leukopenia, urticaria, other skin rashes, dryness of mouth,

hypokalemia, hyponatremia, hypochloremia, hypochloremic alkalosis, hyperuricemia, hyperglycemia, glycosuria, raised BUN or creatinine, fatigue, muscle cramps or spasm, weakness, restlessness, chills, and acute gouty attacks. **Usual Initial Once-Daily Dosages:** mild to moderate essential hypertension—2½ to 5 mg, edema of cardiac failure—5 to 10 mg, edema of renal disease—5 to 20 mg. Dosage adjustment may be necessary during the course of therapy. **How Supplied:** Tablets, 2½, 5 and 10 mg

References:

- 1 Dornfeld L, Kane R: Metolazone in essential hypertension. The long-term clinical efficacy of a new diuretic. *Curr Ther Res* 18: 527-533, 1975
- 2 Data on file, Medical Department, Pennwalt Prescription Products



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KEMPAC/AMPAC Workshop Set for April 20 in Louisville

The KEMPAC/AMPAC Candidate Support Workshop, scheduled for April 20, will deal with many questions that arise concerning candidate support: Why do we need to choose candidates in a bipartisan way? Who should make the choice of candidates? How should the candidate support decisions be made? How does a physician organize a candidate support committee? What should the committee do?

The workshop, beginning at 10 a.m. at the Ramada Inn/Bluegrass Convention Center in Louisville, will be led by national speakers and AMPAC Board members. The KEMPAC Board of Directors will also be meeting in conjunction with the workshop and will be responsive to questions from the membership.

All KEMPAC members, KMA Officers and Trustees, members of the KMA House of Delegates, county medical society leaders, and members of the Auxiliary Board of Directors are particularly urged to attend.

Reservations can be made by contacting the KEMPAC Office, 3532 Ephraim McDowell Drive, Louisville 40205, (502) 454-3505.

Group Travel Plan Offered For AMA Mtg. in California

KMA members and their families are invited to participate in a group travel plan to San Francisco in conjunction with the AMA Annual Meeting on June 18-23. Trip combinations are being offered to San Francisco, San Francisco and Hawaii, or San Francisco and the Pacific Northwest.

Complete details are outlined in a brochure which was mailed to the membership in the April issue of "The Communicator." Arrangements should be made immediately as space is limited. Questions regarding the travel plan should be directed to the American Express Company, 106 South Fourth Street, Louisville, 40202, attention Mrs. Shirley Daly, (502) 585-2368.

KOMA Annual Meeting Set For May 20-21 in Louisville

The 18th Annual Session of the Kentucky Occupational Medical Association will be held May 20-21 at the Executive Inn West in Louisville.

Bruce E. Douglas, M.D., President of the American Occupational Medical Association, will be the featured speaker at the banquet to be held Friday, May 20, at 7:30 p.m. in the Queen Room. Doctor Douglas is Senior Consultant in the Division of Preventive Medicine at the Mayo Clinic.

The two-day session, which is accredited for Category I toward the AMA Physician's Recognition Award, will feature informative presentations by faculty members of the University of Louisville and University of Kentucky medical schools, as well as by private practitioners. Some of the topics to be discussed will be: "Review of Kentucky OSHA, 1976," "Echocardiography as a Diagnostic Tool," "Biomechanical Principles—The Worker

and His Job." and "A Lawyer's Reflections about Workmen's Compensation and the Employee-Employer." A panel of experts will deal with common problems which pertain to the practice of Occupational Medicine.

Pre-registration for the meeting, which is open to all physicians, can be made by contacting Gracie R. Rowntree, M.D., 70 Valley Road, Louisville, Kentucky 40204.

Ky. Surgical Society to Meet May 19-21 at Lake Barkley



Doctor Zuidema

The 28th Annual Meeting of the Kentucky Surgical Society will be held May 19, 20, 21 at Lake Barkley State Park. Over 200 members and guests are expected to attend the three-day session.

George D. Zuidema, M.D., Baltimore, will be the featured speaker for the scientific session. Surgeon-in-Chief of Johns Hopkins Hospital, Doctor Zuidema is currently Chairman of the Study on Surgical Services

for the United States for the American College of Surgeons. A member of the Editorial Board of the *Journal of Surgical Research*, he served as Co-Editor of *Surgery* in 1975.

For more information on the meeting, contact: William T. Swartz, M.D., Secretary, Kentucky Surgical Society, 135 East Maxwell Street, Lexington 40508.

1977 KAFP Meeting, May 12-14 Features Outstanding Program

May 12-14 are the dates for the 26th Annual Scientific Assembly of the Kentucky Academy of Family Physicians. Held at the Ramada Inn/Bluegrass Convention Center in Louisville, the program will be preceded on May 11 with the two business sessions of the Congress of Delegates.

The scientific program is acceptable for 12½ hours of prescribed credit (plus 1 hour each for luncheon seminar) by the American Academy of Family Physicians. Featured on the program will be outstanding presentations by Kentucky physicians and out-of-state guest speakers on such topics as ancillary services, athletics, arthritis, drugs, and self-hypnosis.

The Annual Banquet, to be held May 13 at 7:30 p.m. in Belle Hall, will feature the installation of officers by B. Leslie Huffman, M.D., President of the American Academy of Family Physicians, and an address by Newt Hielscher, "The Contagious Cure."

Other highlights of the annual session include the four luncheon seminars on May 13 (advance registration), a Mexican Fiesta, "Day at the Races," technical and scientific exhibits, and awards presentations.

For further information, contact: Kentucky Academy of Family Physicians, 2211 Medical Arts Building, Louisville 40217.

Ky. Medical Assistants To Hold Annual Mtg. May 13-15

The Kentucky Society, American Association of Medical Assistants, will hold its 15th Annual Meeting, May 13-15 at the Ken-Bar Inn in Gilbertsville.

"Sail to Success with AAMA" is the theme of the three-day session which will include presentations on such topics as new procedures of Blue Cross-Blue Shield, midwife experiences in Appalachia, child abuse, and dialysis.

The Honorable Julian M. Carroll, Governor of Kentucky, will be a guest speaker, as will state advisors, John D. Noonan, M.D., Paducah, and C. Milton Young, III, M.D., Louisville.

For complete information and registration contact: Judith A. Bledsoe, 1920 Madison Street, Paducah 42001; (502) 442-2601 or 443-6472. There is a \$30 registration fee for members, \$40 for non-members.

Digest of Proceedings, Board of Trustees February 10, 1977

The third meeting of the Board of Trustees during the Associational year was held on February 10, 1977, at the Ramada Inn in Louisville prior to the special meeting of the KMA House of Delegates held on that same date.

President Parks reported on his activities since the last Board session and elaborated on his attendance at the AMA Leadership Conference and meetings with Metropolitan regarding the Medicare reimbursement mechanism in Kentucky. A report on AMA matters was then presented by AMA Trustee, Hoyt Gardner, M.D. of Louisville.

Chairman Holloway then presented a number of reports and recommendations from the Executive Committee to include a detailed membership and dues assessment report which resulted in a policy concerning members who had not paid their dues assessment of 1975. Further reports were presented concerning Liability Insurance and CME. The Board then authorized a group travel program through American Express for KMA members attending the AMA Convention in San Francisco in June.

The Board named John S. Llewellyn, M.D. of Louisville as Editor of the *KMA Journal* to fill the vacancy created by the death of *Journal* Editor, Henry B. Asman, M.D. A. Evan Overstreet, M.D. was named Associate Editor, and David L. Stewart, M.D. was named Assistant Editor.

In other actions, the Board approved funds for a special request requiring legal fees to defend an action taken by the KMA Judicial Council. Possible changes in the time for House of Delegates meetings in the future were also considered, and nominations were made by the Board to the KEMPAC Board of Directors.

A full discussion was then held relating to the special session of the House of Delegates and all of the activities that had taken place involving Medicare reimbursement and KMA policy since the September regular meeting of the House of Delegates.

Prior to adjournment, the Chairman announced that the next meeting of the KMA Board would be held on April 6-7.



Committee Activity

Executive Committee February 9, 1977

The KMA Executive Committee met Wednesday evening, February 9, 1977, prior to the special meeting of the House of Delegates.

Numerous reports of committees and their activities were presented to the members of the Executive Committee, and appropriate action was taken in the areas of community and rural health, hospitals, CME, and mental health-mental retardation. Other subjects considered included membership, liability insurance, naming Editors of the *KMA Journal*, legal matters, membership benefit programs, and Annual Meeting plans for the future.

A draft of a day-long program for county society presidents was reviewed and the special meeting of the House of Delegates was discussed. A study of KMA's relationships with students, interns, and residents was also initiated.

Health Care Costs Committee March 3

The Health Care Costs Committee met on March 3 to develop nominations for membership on a KMA Council on Health Costs. The Council will be composed of physicians, leaders from business and industry, organized labor, and representatives from allied health organizations and third party carriers.

The Council is envisioned as a mechanism for communication between the above-mentioned agencies with regard to rising health costs and the many complex factors affecting those costs.

McDowell House Board of Managers March 9

The McDowell House Board of Managers at their quarterly meeting on March 9 discussed the current problems with renovating the House and reviewed recent publications on Doctor McDowell and his surgical techniques. Controversy that arose from these publications prompted the Board to initiate research for future discussion. The controversial articles questioned whether Doctor McDowell was actually the first person in America to perform abdominal surgery.

Proposed expansion of Constitution Square in Danville to Second Street where McDowell House is located is expected to increase the House's exposure to the public. The Board of Managers wishes to encourage every member of the profession to visit the House and reminds physicians that the House is not self-supporting and needs the aid of all to maintain it for posterity.

EYEBALL TO EYEBALL

We get many applications in the mail from persons that we do not know and, frankly, we love it. However, every once in a while when someone has a claim he is unhappy because he has a waiting period that he doesn't like or he forgot how little coverage that he purchased and now there is no way to increase it.

We know everyone is busy but the best way to purchase anything is the personal "eyeball to eyeball" interview.

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E. W. Ernst, Jr.
Administrator

Ray D. Jones
Associate

Joint Practice Seminar March 5

The Joint Practice Seminar, which was held on March 5 at Ramada Inn, was classified by Kenneth Crawford, M.D., Louisville, Co-Chairperson of the Joint Practice Committee, as a successful first step in establishing a workable joint practice effort in the state.

The Seminar, which was attended by physicians, nurses, and hospital administrators, provided new insight into the problems of joint practice and the role each of them must assume to achieve a working relationship with the various allied health groups.

The Joint Practice Committee hopes to use the results of this Seminar as a foundation for establishing new avenues of communication with the medical profession, hospitals, and the public.

Medical Aspects of Sports Seminar March 17-18

The Sixth Annual Medical Aspects of Sports Seminar was held on March 17-18 at the Executive Inn in Louisville in conjunction with the Boys High School Basketball Tournament.

Ronald E. Walldridge, M.D., Shelbyville, Chairman of the Committee on School Health, Physical Education and Medical Aspects of Sports, was very pleased with the number of physicians in attendance as they made up almost 40% of the record registration of 150. Doctor Walldridge hopes that more coaches and trainers can be attracted to subsequent seminars. The Seminar is now attracting such diversified groups as school administrators, athletic directors, physical therapists, and emergency medical technicians and it is expected that more support from these groups can be expected in the future.

Excellent clinical presentations on physical maturation and ENT and knee injuries and general sessions given by Fran Curci, head football coach of the University of Kentucky; Thomas Bell, retired NFL official; and Nathan Smith, M.D., Professor of Sports Medicine, highlighted the annual program.

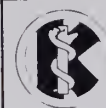
The Committee wishes to express its sincere appreciation to all the participants and speakers for their support.

MD Vacancies in Project USA

Project USA, the American Medical Association's program to recruit physicians for short-term service (usually two weeks) has year-round vacancies at Indian Health Service facilities, and National Health Service Corps rural communities. Project USA physicians receive \$500 a week plus round trip air coach fare, and family housing accommodations are provided.

Malpractice insurance coverage is furnished under the Federal Torts Claims Act for service on Indian reservations, however, the physician must provide his/her own malpractice insurance at a NHSC site. It is a simple procedure to extend an existing coverage to include short-term service at a NHSC location. Any expense involved in this process will be assumed by Project USA.

Physicians interested in participating in this program should contact John Naughton, AMA, 535 N. Dearborn, Chicago, Illinois 60610; (312) 751-6388.



Trustees' Report

FIFTH TRUSTEE DISTRICT

Cecil L. Grumbles, M.D., Louisville

The bipartisan "Citizens Forum for Doctors" Committee started monthly breakfast meetings in February with our Congressmen and other government officials. This subscription series is a superb way to meet and discuss our problems with them. Attendance has been very good, and one may sign up for the entire series or a single meeting. We frequently underestimate our single and collective strengths.



Kenneth Peters, M.D., Louisville, is a Republican candidate for State Senator from the 34th District. Ken is a dedicated family practitioner and will be a valuable addition in state government. Very few of us take the time or effort to run for public office.

The Jefferson County Medical Society is willing to financially assist any member who feels he has been maliciously sued. The doctor provides the details, and if the Board of Governors approve, up to \$1,000 will be provided as assistance for legal fees. This applies to countersuits against patients or attorneys. One request from a physician has been approved in a case against an attorney. At last we are utilizing an avenue of redress that has long been neglected.

SIXTH TRUSTEE DISTRICT

Earl P. Oliver, M.D., Scottsville



As the elected representative of the Sixth Trustee District, I would like to direct my remarks to unity of purpose and unity of action by the members of the Kentucky Medical Association. In my discussions with members of the District prior to the February 10th. KMA House of Delegates meeting, this desire for unity was the most frequent topic of conversation.

The need for a unified profession was discussed in the Board of Trustees meeting and was further strongly emphasized by many delegates in the House of Delegates meeting on February 10. The almost unanimous acceptance by the House of the substitute resolution, introduced by the Delegate from the Pennyriple Multi-County Society, indicated further a strong desire for a positive, no nonsense position by the KMA in dealing with third party intermediaries.

I believe that the future of medicine is in the hands of the medical profession: United we stand and can control our own destiny and the future of medicine; divided we fall prey to bureaucratic regimentation which will result in the decline of high quality medical care.



Headquarters Activity

KMA had physicians and staff members in attendance at the following activities and events:

MARCH

- 2 Interim Joint Commission on Administrative Rules and Regulations, Frankfort
- 10 Claims and Utilization Review Committee, Louisville
- 25 Conference Breakfast with Congressional Members, Louisville
- 30 Title XIX Committee, Frankfort

APRIL

- 6 Board of Medical Licensure Hearing on CME, Somerset
- 6-7 KMA Board of Trustees, Louisville
- 11 Journal Editors, Louisville
- 14 Committee on Maternal and Child Care, Louisville
- 15 Community and Rural Health Committee, Louisville
- 20 KEMPAC Workshop, Louisville
- Judicial Council, Louisville
- 21 Joint Practice Committee, Louisville
- 26-27 Resident's Workshop, Louisville
- 28 Blue Cross-Blue Shield Board Meeting, Louisville



Members in the news

NEW MEMBERS

FLOYD

Robert Whitmoyer, M.D., McDowell

JEFFERSON

James Bailen, M.D., Louisville
 Fadhil Alsikafi, M.D., Louisville
 Brent A. Blue, M.D., San Francisco
 Robert Gaines, M.D., Louisville
 Louis Kasten, M.D., Louisville
 Laurence M. McKinley, M.D., Louisville
 Jon Miller, M.D., Louisville
 Fernando C. Pajo, Jr., M.D., Louisville
 James D. Payne, M.D., Louisville
 Richard Penny, M.D., Louisville
 William C. Sanford, M.D., Louisville

HONORS

C. Melvin Bernhard, M.D., Louisville, was recently elected President of the Southeastern Surgical Conference. Doctor Bernhard, a general surgeon, is a member of the McDowell House Board of Managers.

John S. Spratt, Jr., M.D., Louisville, has been named an American Cancer Society Professor of Clinical On-

cology. A Professor of Surgery at the University of Louisville, Doctor Spratt is one of 30 to be honored in the United States. He is past president of the Association of American Cancer Institutes and serves on the editorial advisory boards of *Cancer* and *The Journal of Surgical Oncology*.

Peter P. Bosomworth, M.D., Lexington, received a medal of honor from the National Cheng-Kung University of Taiwan for his contributions to the promotion of international cooperation in culture and education. Doctor Bosomworth is Vice President of the University of Kentucky Medical Center.

Cerebral Ischemia Induced by Effort "The Steal Syndromes"

(Continued from page 177)

treated by this method have experienced complete resolution of symptoms.

Summary

Although the clinical and angiographic correlations are difficult in both subclavian and carotid steal syndromes, both conditions must be borne in mind when making a decision on overall cerebral circulatory status. Only by awareness of their existence will they be recognized.

DONALD E. FRY, M.D.

CHARLES W. MCGILL, M.D.

CHRISTOPHER SHIELDS, M.D.

PHIL J. HARBRECHT, M.D.

References

1. Barnett, H.J.M., Wortzman, G., Gladstone, R.M., and Lougheed, W.M.: Division and reversal of cerebral blood flow. External carotid artery "steal." *Neurology* 20:1, 1970.
2. Crawford, E.S., DeBailey, M. E., Blaisdell, F.W., et al.: Hemodynamic alterations in patients with cerebral artery insufficiency before and after operation. *Surgery* 48:76, 1960.
3. Crawford, E.S., DeBailey, M.E., Morris, G.C., Jr., and Howell, J.F.: Surgical treatment of occlusion of the innominate, common carotid, and subclavian arteries: A 10-year experience. *Surgery* 65:17, 1969.
4. Fields, W.S., Bruetman, M.E., and Weibel, J.: Collateral circulation of the brain. *Monogr. Surg. Sci.* 2:183, 1965.
5. Fields, W.S., and Lemak, N.A.: Joint study of extracranial arterial occlusion. VII. Subclavian steal—A review of 168 cases. *JAMA* 222:1139, 1972.
6. Finkelstein, N.M., Byer, A., and Rush, B.F., Jr.: Subclavian-subclavia, bypass for the subclavian steal syndrome. *Surgery* 71:142, 1972.
7. Reivich, M., Holling, H.E., Roberts, B., and Toole, J.F.: Reversal of blood flow through the vertebral artery and its effect on cerebral circulation. *N. Engl. J. Med.* 265:878, 1961.
8. Rob, C.: Incipient strokes: Technique of surgical therapy. In: Millikan, C.H., Siekert, R.G., and Whisnant, J.P. (eds.): *Cerebral Vascular Diseases*. New York: Grune and Stratton, 1961, p. 112.
9. Snider, R.L., Porter, J.M., and Eidemiller, L.R.: Axillary-axillary artery bypass for the correction of subclavian artery occlusive disease. *Ann. Surg.* 180:888, 1974.

ROLL CALL

House of Delegates—Special Session

February 10, 1977

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| | | |
|-------------------------------|------------------------|---------|
| Speaker | Carl Cooper, Jr. | Present |
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| President-Elect | John P. Stewart | Present |
| Vice-President | John M. Baird | Present |
| Secretary-Treasurer | S. Randolph Scheen | Present |
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| Delegate to AMA | Fred C. Rainey | |
| Delegate to AMA | David B. Stevens | Present |
| Alternate Delegate to the AMA | Kenneth P. Crawford | Present |
| Alternate Delegate to the AMA | Wally O. Montgomery | Present |
| Alternate Delegate to the AMA | Lee C. Hess | Present |
| Parliamentarian | Bennett L. Crowder, II | Present |

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| Third | Frank R. Pitzer | Present |
| Fourth | Charles B. Spalding | Present |
| Fifth | Cecil L. Grumbles | |
| Sixth | Earl P. Oliver | Present |
| Seventh | William H. Keller | Present |
| Eighth | Richard J. Menke | Present |
| Ninth | Don R. Stephens | Present |
| Tenth | James B. Holloway, Jr. | Present |
| Eleventh | Dwight L. Blackburn | Present |
| Twelfth | William T. Watkins | Present |
| Thirteenth | Howard B. McWhorter | |
| Fourteenth | Jerry D. Fraim | Present |
| Fifteenth | Harold L. Bushey | Present |

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|------------|--------------------|---------|
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| Second | Albert H. Joslin | |
| Third | Henry R. Bell | Present |
| Fourth | Terrell D. Mays | |
| Fifth | Glenn W. Bryant | |
| Sixth | Martin Wilson, Jr. | ..... |
| Seventh | William H. Powers | ..... |
| Eighth | Robert C. Smith | Present |
| Ninth | Kelly G. Moss | ..... |
| Tenth | Richard F. Hench | Present |
| Eleventh | Robert L. Davis | ..... |
| Twelfth | John M. Baird | Present |
| Thirteenth | George R. Bellamy | |
| Fourteenth | Harvey A. Page | Present |
| Fifteenth | W. H. Stepchuck | Present |

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| Past President | Lee C. Hess | Present |
| Past President | John S. Harter | Present |

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|------------|--------------------|---------|
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| CARLISLE | | |
| FULTON | | |
| GRAVES | C. Douglas LeNeave | Present |
| HICKMAN | | |
| LIVINGSTON | Stephen Burkhart | |
| MARSHALL | Keith E. Ellis | |
| McCRACKEN | James C. Embry | Present |

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| | | |
|---------|--------------------|---------|
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| | Albert H. Joslin | Present |
| | William E. Pearson | Present |
| | Marilyn Sanders | Present |

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|-----------|----------------------|---------|
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| HENDERSON | Hugh H. Wilhite | |
| McLEAN | Robert E. Norsworthy | Present |
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| CHRISTIAN | Robert Amis | Present |
| | Delmas M. Clardy | Present |
| LYON | G. H. McCord | Present |
| MUHLENBERG | Charles F. Winkler | Present |
| TODD | Larry Brock | Present |
| TRIGG | | |

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| | | |
|--------------|-------------------|---------|
| BRECKINRIDGE | W. Bruce Hamilton | Present |
| BULLITT | V. F. Duvall | |
| GRAYSON | | |
| GREEN | | |
| HARDIN | T. J. Ferriell | Present |
| HART | James Crews | ..... |
| LARUE | | |
| MEADE | | |
| NELSON | Emmett W. Wood | Present |
| TAYLOR | Henry F. Chambers | Present |
| WASHINGTON | Dixie E. Snider | Present |

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| | | |
|-----------|-----------------------------|---------|
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| | William Buschemeyer, Jr. | Present |
| | Peter C. Campbell | Present |
| | E. Dean Canan | Present |
| | James W. Curry | Present |
| | Bob M. DeWeese | Present |
| | Charles E. Dobbs | Present |
| | Michael Flynn | Present |
| | Henry D. Garretson | Present |
| | Darius Ghazi | Present |
| | Elvin T. Gibson | Present |
| | Clinton C. Cook, III (Alt.) | Present |
| | Laman A. Gray, Jr. | ..... |
| | Harold D. Haller | Present |
| | Terry Henkel | Present |
| | R. Brooks Howard | Present |
| | Robert S. Howell | Present |
| | John E. Kuhn | Present |
| | Ferrell Lowrey | Present |
| | Joseph Marshall | Present |
| | James P. Moss | Present |
| | Charles R. Oberst | ..... |
| | Harold Baker (Alt.) | Present |
| | C. Ray Potts | ..... |
| | B. Frank Radmacher | Present |
| | Ben A. Reid, Jr. | Present |
| | Anne C. D. Richman | Present |
| | R. Parnell Rollings | Present |
| | Charles B. Severs | Present |
| | A. Bert Sparrow | Present |
| | David L. Stewart | Present |
| | Thomas Stigall | Present |
| | Walter Thompson | Present |
| | David E. Townes | Present |
| | Lucy Tyler | Present |
| | Walter L. Wilson | Present |
| | Leo J. Wine | Present |
| | William E. Yancey | Present |
| | Marvin Yussman | Present |
| | Walter Zukof | Present |
| | Lynn L. Ogden | Present |

Sixth District

| | | |
|-------|----------------|---------|
| ADAIR | Millard C. Loy | Present |
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|------------|--------------------|---------|------------|----------------|
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| BARREN | | | | |
| BUTLER | | | | |
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| EDMONSON | | | | |
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| METCALFE | | | MONTGOMERY | Present |
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| SIMPSON | J. Michael Pulliam | Present | POWELL | |
| WARREN | John P. Blackburn | Present | WOLFE | Paul F. Maddox |
| | John E. Downing | Present | | |
| | Luther M. Wilson | Present | | |

Seventh District

| | | | | |
|----------|-------------------|---------|--|--|
| ANDERSON | H. Boyd Caudill | ..... |  |  |
| CARROLL | Cecil D. Martin | Present | | |
| FRANKLIN | B. B. Baughman | Present | | |
| | O. M. Patrick | Present | | |
| GALLATIN | R. M. Goodman | Present | | |
| GRANT | Wyatt Norvell | Present | | |
| HENRY | Ed G. Houchin | Present | | |
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| OWEN | | | | |
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| SPENCER | | | | |
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Eighth District

| | | | | |
|-----------|---------------------|---------|--|--|
| BOONE | Carl Brueggemann | Present | | |
| CAMPBELL- | Howard Heringer | Present | | |
| KENTON | Paul H. Klingenberg | Present | | |
| | William Monnig | Present | | |
| | R. C. Smith | Present | | |
| | Robert E. Smtih | Present | | |
| | Fred A. Stine | Present | | |
| | Ray Timmerman | Present | | |

Ninth District

| | | | | |
|-----------|--------------------|---------|--|--|
| BATH | | | | |
| BOURBON | Harry L. Galloway | Present | | |
| BRACKEN | | | | |
| FLEMING | | | | |
| HARRISON | Don Stephens | Present | | |
| MASON | | | | |
| NICHOLAS | | | | |
| PENDLETON | Robert L. McKinney | Present | | |
| ROBERTSON | | | | |
| SCOTT | Gus A. Bynum | Present | | |

Tenth District

| | | | | |
|---------|-------------------------|---------|--|--|
| FAYETTE | Harry L. Bailey | Present | | |
| | Walter R. Brewer | Present | | |
| | Thomson R. Bryant, Jr. | Present | | |
| | P. Raphael Caffrey | Present | | |
| | Melvin L. Dean | Present | | |
| | Marcus L. Dillon, Jr. | Present | | |
| | Glenn U. Dorroh | Present | | |
| | Ward O. Griffen, Jr. | Present | | |
| | Allen E. Grimes, Jr. | Present | | |
| | Walter D. Harris | Present | | |
| | C. Nicholas Kavanaugh | Present | | |
| | H. Brooks Morgan (Alt.) | Present | | |
| | Edwin J. Nighbert | Present | | |
| | John M. Stoeckinger | Present | | |
| | John E. Trevey | Present | | |
| | Philip G. Weiler (Alt.) | Present | | |

JESSAMINE
WOODFORD

Eleventh District

| | | | | |
|---------|----------------|-------|--|--|
| CLARK | | | | |
| ESTILL | | | | |
| JACKSON | Philip R. Curd | | | |
| LEE | | | | |
| MADISON | Don F. Cloys | | | |

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Twelfth District

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|------------|---------------------|---------|--|--|
| BOYLE | Elmer Jackson | Present | | |
| CASEY | Garnett J. Sweeney | Present | | |
| CLINTON | Floyd B. Hay | Present | | |
| GARRARD | Paul J. Sides | Present | | |
| LINCOLN | Charles E. Crase | Present | | |
| McCREARY | John Patton | Present | | |
| MERCER | Bacon R. Moore, III | Present | | |
| PULASKI | J. Roy Biggs | Present | | |
| | Veryl Frye | Present | | |
| ROCKCASTLE | George W. Griffith | Present | | |
| RUSSELL | | | | |
| WAYNE | | | | |

Thirteenth District

| | | | | |
|----------|--------------------|---------|--|--|
| BOYD | Paul Lett | Present | | |
| | Wiley E. Kozee | Present | | |
| CARTER | | | | |
| ELLIOTT | | | | |
| GREENUP | | | | |
| LAWRENCE | | | | |
| LEWIS | | | | |
| MORGAN | James D. Frederick | Present | | |
| ROWAN | John L. Kiesel | Present | | |
| | E. G. Barker | Present | | |

Fourteenth District

| | | | | |
|-----------|-----------------|---------|--|--|
| BREATHITT | Price Sewell | Present | | |
| FLOYD | W. Grady Stumbo | Present | | |
| JOHNSON | | | | |
| KNOTT | Gene T. Watts | Present | | |
| LETCHER | Alfred E. Krake | Present | | |
| MAGOFFIN | | | | |
| MARTIN | | | | |
| PERRY | | | | |
| PIKE | Max P. Jones | Present | | |
| | Harvey A. Page | Present | | |

Fifteenth District

| | | | | |
|---------|----------------------|---------|--|--|
| BELL | J. B. LeSage | Present | | |
| | Emanuel H. Rader | Present | | |
| CLAY | W. E. Becknell | Present | | |
| HARLAN | M. H. Schosser | Present | | |
| KNOX | Rofino F. Crisostomo | Present | | |
| LAUREL | Paul R. Smith | Present | | |
| LESLIE | W. B. R. Beasley | Present | | |
| WHITLEY | R. D. Pitman | Present | | |

The information in the Roll Call was taken from the attendance record cards signed by the delegates prior to the special called meeting of the House, February 10, 1977.

Focus on High Blood Pressure

May 1977 is being recognized as National High Blood Pressure Month. The purpose of this national focus is to make the public and health professionals aware of the prevalence and danger of high blood pressure, that it is asymptomatic in nature, and that through continuing treatment by a qualified physician it can be controlled.

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Use in Pregnancy: Use of minor tranquilizers during first trimester could almost always be avoided because of increased risk of congenital malformations as suggested by several studies. Consider possibility of pregnancy when instituting therapy; advise patients to discuss pregnancy if they intend to or do become pregnant.

Precautions: In the elderly and debilitated, in children over six, limit to smallest effective dosage (initially 10 mg or less per day) to preclude ataxia or oversedation, increasing gradually as needed and tolerated. Not recommended in children under six. Though generally not recommended, concurrent administration with other psycho-

tropics seems indicated, carefully consider individual pharmacologic effects, particularly in use of potentiating drugs such as MAO inhibitors and phenothiazines. Observe usual precautions in presence of impaired renal or hepatic function. Paradoxical reactions (e.g., excitement, stimulation and acute rage) have been reported in psychiatric patients and hyperactive aggressive children. Employ usual precautions in treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation have been reported very rarely in patients receiving the drug and oral anticoagulants; causal relation-

ship has not been established clinically.

Adverse Reactions: Drowsiness, ataxia and confusion may occur, especially in the elderly and debilitated. These are reversible in most instances by proper dosage adjustment, but are also occasionally observed at the lower dosage ranges. In a few instances syncope has been reported. Also encountered are isolated instances of skin eruptions, edema, minor menstrual irregularities, nausea and constipation, extrapyramidal symptoms, increased and decreased libido—all infrequent and generally controlled with dosage reduction; changes in EEG patterns (low-voltage fast activity) may appear during and after treatment; blood dyscrasias (including agranulocytosis), jaundice and hepatic dysfunction have been reported occasionally, making periodic blood counts and liver function tests advisable during protracted therapy.

Usual Daily Dosage: Individualize for maximum beneficial effects. **Oral—Adults:** Mild and moderate anxiety and tension, 5 or 10 mg *t.i.d.* or *q.i.d.*; severe states, 20 or 25 mg *t.i.d.* or *q.i.d.* **Geriatric patients:** 5 mg *b.i.d.* to *q.i.d.* (See Precautions.)

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Please see preceding page for a summary of product information.

May 1977
Volume 75
Number 5

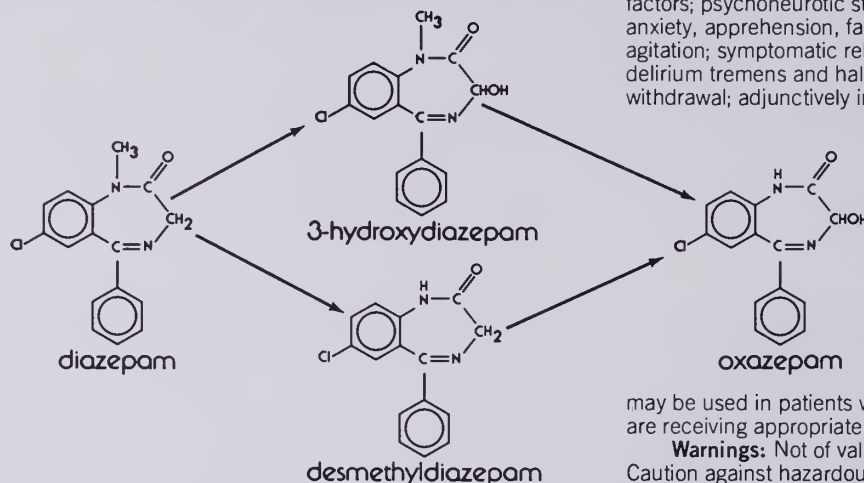
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Indications: Tension and anxiety states; somatic complaints which are concomitants of emotional factors; psychoneurotic states manifested by tension, anxiety, apprehension, fatigue, depressive symptoms or agitation; symptomatic relief of acute agitation, tremor, delirium tremens and hallucinosis due to acute alcohol withdrawal; adjunctively in skeletal muscle spasm due

to reflex spasm to local pathology; spasticity caused by upper motor neuron disorders; athetosis; stiff-man syndrome; convulsive disorders (not for sole therapy).

Contraindicated:

Known hypersensitivity to the drug. Children under 6 months of age. Acute narrow angle glaucoma;

may be used in patients with open angle glaucoma who are receiving appropriate therapy.

Warnings: Not of value in psychotic patients.

Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anticonvulsant medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms (similar to those with barbiturates and alcohol) have occurred following abrupt discontinuance (convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). Keep addiction-prone individuals under careful surveillance because of their predisposition to habituation and dependence.

Usage in Pregnancy: Use of minor tranquilizers during first trimester should almost always be avoided because of increased risk of congenital malformations as suggested in several studies. Consider possibility of pregnancy when instituting therapy; advise patients to discuss therapy if they intend to or do become pregnant.

Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed; drugs such as phenothiazines, narcotics, barbiturates, MAO inhibitors and other antidepressants may potentiate its action. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.

Side Effects: Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.



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Volume 75 • May 1977

*Issued Monthly Under the Direction
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The Journal Of The Kentucky Medical Association

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MESSAGE FROM THE PRESIDENT



As a physician, I become deeply concerned each time I read an article in the newspaper which would picture the physician as the ruthless businessman or see a television documentary which would picture physicians as incompetent technicians who neglect their patients. The implication as one reads these articles and sees these programs, one would feel, is that they apply to all physicians. Nothing in my mind could be further from the truth.

In 20 years of practice in Kentucky I have found our physicians to be those of the highest caliber, putting the care of their patients first regardless of any monetary return. I have great respect and admiration for the devotion to duty of all of the physicians with whom I have been associated with while being in practice. I think the picture that I have of the physicians that I know is best described by an article in Harvey's *Principles and Practice of Medicine* called "The Approach to the Patient". In this article, an essay called "The Care of the Patient" by Francis Peabody is quoted. I would like to quote two excerpts from this essay.

"The treatment of disease may be entirely impersonal; the care of a patient must be completely personal. The significance of the intimate personal relationship between physician and patient cannot be too strongly emphasized, for in an extraordinarily large number of cases both diagnosis and treatment are directly dependent on it, and failure of the young physician to establish this relationship accounts for much of his ineffectiveness in the care of patients.

"What is spoken of as a 'clinical picture' is not just a photograph of a man sick in bed; it is an impressionistic painting of the patient surrounded by his home, his work, his relations, his friends, his joys, sorrows, hopes, and fears.

"Thus, the physician who attempts to take care of a patient while he neglects those factors which contribute to the emotional life of this patient is as unscientific as the investigator who neglects to control all the conditions which may affect his experiment. The good physician knows his patients through and through and his knowledge is bought dearly. Time, sympathy and understanding must be lavishly dispensed but the reward is to be found in that personal bond which forms the greatest satisfaction of the practice of medicine. One of the essential qualities of the clinician is interest in humanity, for the secret of the care of the patient is in caring for the patient."

Even though the practice of medicine has become a much more highly technical science than it was 50 years ago when this essay was written, it still applies, I think, to all of our physicians.

In my 12 years as Secretary of the Kentucky Medical Association, the men whom I have met in the leadership of this organization have all impressed me as being the type of individual described in this essay. Not only are they physicians with good scientific knowledge but also men who have compassion in their hearts for the care of their patients. It is this desire for the continued quality care of patients which gives them the moral and physical strength to spend many extra hours at no compensation in their dedication toward working with and for the physicians and patients of the Commonwealth of Kentucky.

It is these men who are in the leadership of KMA who will be active in the KMA Leadership Conference which will be held on July 14. I certainly hope that everyone will be able to attend to become more involved in the continuing search for providing continued excellence of medical care for our patients.

S. Randolph Scheen, M.D., KMA Secretary-Treasurer

This is the third in a series of articles written at the request of KMA President, Paul J. Parks, M.D.

A Link in the Chain

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Since county auxiliaries change officers in the spring, they are now gearing down on their annual projects. This is the main reason why the state Auxiliary is in the process of trying to work out all the details to present at convention the proposal to change the annual convention to a spring date. That would mean that county, state, and national would be in step. The annual meeting will be moved around the state—enabling more auxiliaries to participate and develop more meaningful friendships among our members. The Fall Board meeting will be held in conjunction with the KMA convention. With fewer meetings to attend at board meeting it will allow more time for social functions or shopping.

I am pleased to report our membership has exceeded 1,400. With our theme of "Auxiliary has something for everyone"—membership chairmen and devoted individuals have proven our point. Congratulations!

The AMAA National Convention will be held June 19 to June 22 in San Francisco at the Hilton Hotel. Besides all the necessary meetings there will be two luncheons, the first being on Monday with guest speaker William F. Buckley, Jr., founder and President of *National Review*. His topic will be "Some of the Problems of Freedom." In addition to the luncheon the meeting on Monday is scheduled to break at 4 p.m. for a wine tour. The speaker at the Tuesday luncheon will be Doctor Sabin. On Wednesday there will be a reception honoring Mrs. Chester L. Young from Missouri, AMAA Auxiliary President, and John H. Budd, M.D., from Ohio, AMA President.


AKMA would like to extend our congratulations to Mrs. Hoyt Gardner (Rose) as she has been nominated as First Vice President to AMAA. The elections will be in San Francisco at the annual convention.

The Auxiliary's original pen, original gavel, and the pen of the president-elect and president retired at convention 1976 (due to our change of name) and are now beautifully displayed in a shadow box which will hang in the Auxiliary office at the KMA building.

It was your President's pleasure to present the AMA-ERF checks at the KMA Board of Trustees meeting. D. Kay Clawson, M.D., Dean of the University of Kentucky College of Medicine received a check for \$6,154.80. Arthur Keeney, M.D., Dean of University of Louisville School of Medicine received a check for \$10,888.39. Both doctors expressed sincere appreciation for the Auxiliary's hard work in raising these funds. The Board members were reminded that direct donations can be earmarked to a designated school of their choice.

On behalf of the entire Auxiliary, we would like to welcome our reorganized auxiliary, Madison County. This auxiliary will include Richmond and Berea and will bring our total organized county auxiliaries to 29. This is just another step forward for the year 1976-1977. To make our new county feel a part of the state Auxiliary, they were presented several baby gifts at the Spring Board meeting since they are our new baby!

MRS. R. PARNELL ROLLINGS, PRESIDENT
AUXILIARY TO THE KMA



Natural balance doesn't always come naturally

Big Balanced Rock, Chiricahua Mountains, Arizona (approx. 1,000 tons)

Most Widely Prescribed—Antivert is the most widely prescribed agent for the management of vertigo* associated with diseases affecting the vestibular system such as Menière's disease, labyrinthitis, and vestibular neuronitis.

Relief of Nausea and Vomiting—Antivert/25 can relieve the nausea and vomiting often associated with vertigo*.

Dosage for Vertigo*—The usual adult dosage for Antivert/25 is one tablet t.i.d.

SUMMARY OF PRESCRIBING INFORMATION

INDICATIONS. Based on a review of this drug by the National Academy of Sciences—National Research Council and/or other information, FDA has classified the indications as follows:

Effective: Management of nausea and vomiting and dizziness associated with motion sickness.

Possibly Effective: Management of vertigo associated with diseases affecting the vestibular system.

Official classification of the less than effective indications requires further investigation.

CONTRAINDICATIONS. Administration of Antivert (meclizine HCl) during pregnancy or to women who may become pregnant is contraindicated in view of the teratogenic effect of the drug in rats.

The administration of meclizine to pregnant rats during the 12-15 day of gestation has produced cleft palate in the offspring. Limited studies using doses of over 100 mg./kg./day in rabbits and 10 mg./kg./day in pigs and monkeys did not show cleft palate. Congeners of meclizine have caused cleft palate in species other than the rat.

Meclizine HCl is contraindicated in individuals who have shown a previous hypersensitivity to it.

WARNINGS. Since drowsiness may, on occasion, occur with use of this drug, patients should be warned of this possibility and cautioned against driving a car or operating dangerous machinery.

Usage in Children: Clinical studies establishing safety and effectiveness in children have not been done; therefore, usage is not recommended in the pediatric age group.

Usage in Pregnancy: See "Contraindications."

ADVERSE REACTIONS. Drowsiness, dry mouth and, on rare occasions, blurred vision have been reported.

More detailed professional information available on request.

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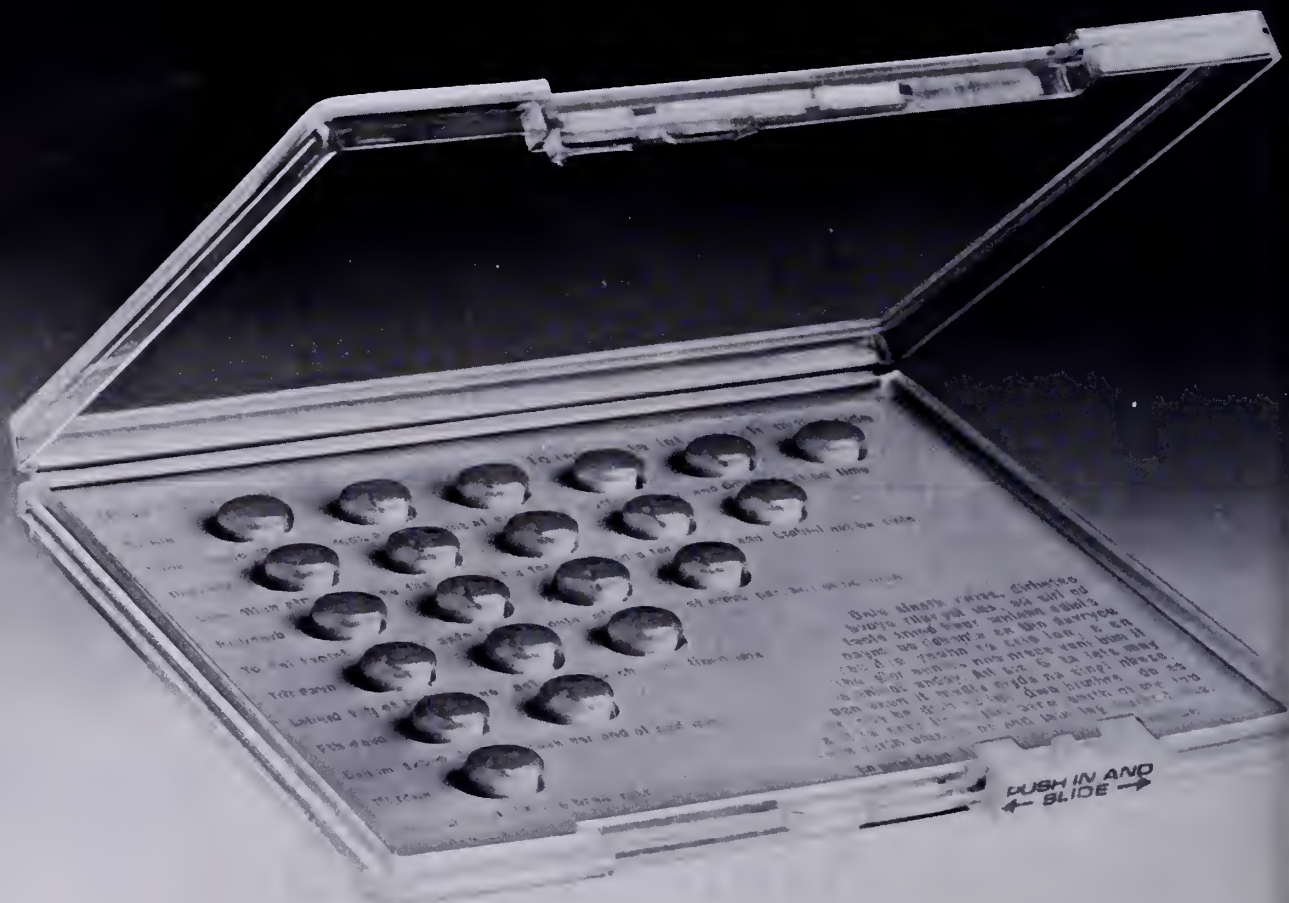
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The explicit printed dosage instructions that accompany each Dosepak make it easy for the patient to understand and follow the dosage regimen.





POSTGRADUATE OPPORTUNITIES



IN KENTUCKY

MAY

- 11-14 Annual Meeting, Kentucky Academy of Family Physicians, Ramada Inn/Bluegrass Convention Center, Louisville
- 13-15 Kentucky Society, American Association of Medical Assistants, Ken-Bar Inn, Gilbertsville
- 17 "Financial Control of Your Medical Practice" Workshop, Hyatt Regency, Lexington
- 18 "Financial Control of Your Medical Practice" Workshop, Ramada Inn-Hurstbourne Lane, Louisville
- 18-20 Symposium on Radiology of the Non-Traumatized Emergency Room Patient,* Fee: \$250. Hyatt Regency, Lexington
- 19 "Financial Control of Your Medical Practice" Workshop, Kenlake Resort Park, Hardin
- 19-21 Spring meeting, Kentucky Surgical Society, Lake Barkley State Park
- 20-21 Spring Meeting, Kentucky Occupational Medical Association, Executive Inn West, Louisville
- 24 "Adult Respiratory Distress Syndrome," 7 p.m., sponsored by the Letcher County Medical Society, Whitesburg Appalachian Regional Hospital, Whitesburg
- 25-26 KMA Emergency Medical Care Seminar, Ramada Inn/Bluegrass Convention Center, Louisville
- 26-27 "Pediatric Chest Problems,"* Fee: To be determined. Hyatt Regency, Lexington

JUNE

- 1 "Hypertension—Workup and Management,"** Louisville Area CME Consortium, Health Sciences Center, Louisville
- 1-2 "Alcoholism: The Dynamics of Intervention and Recovery," sponsored by the University of Louisville, Canterbury Room, Executive Inn, Louisville
- 1-3 International Conference on the Clinical Uses of Carcinoembryonic Antigen (CEA)*, Hyatt Regency Lexington. Fee: \$75.

*For further information, contact: Frank R. Lemon, M.D., Associate Dean for Continuing Education, University of Kentucky College of Medicine, Lexington 40506

**For further information contact: Gerald D. Swim, Executive Director, Office of Continuing Education, University of Louisville School of Medicine, Louisville 40202

- 9-11 Wangenstein Surgical Symposium,* Fee: \$200. University of Kentucky Medical Center, Lexington

JULY

- 17-22 7th Annual Kentucky School of Alcohol Studies, Morehead State University, Morehead

U.L. To Sponsor Seminar On Alcoholism June 1-2

"Alcoholism: The Dynamics of Intervention and Recovery," an annual seminar sponsored by the University of Louisville Department of Health, Physical Education and Recreation, will be held June 1-2 at the Executive Inn in Louisville.

Featured on the two-day program will be Russell F. Smith, M.D., Medical Director of the Brighton Alcoholic Hospital in Michigan. Doctor Smith is Michigan State Chairman of the American Medical Society for Alcoholism and is Chairman of the Michigan State Medical Society Intervention Committee for Impaired Physicians.

The seminar, which is acceptable for 12 credit hours of Category II toward the AMA Physicians Recognition Award, is open to "anyone who deals with an alcoholic or with the problem of alcoholism." The Kentucky Medical Association is one of several co-sponsors of this program. There is a \$20 registration fee which can be paid by contacting Joe Trabue, Department of HPER, University of Louisville, Louisville, Kentucky 40208.

Conferences For Medical Professionals

A calendar listing of over 500 national/international meetings, conferences, and seminars in the medical sciences for 1977. All medical specialties included. Send a \$10.00 check or money order payable to Professional Calendars, P.O. Box 40083, Washington, D.C. 20016.

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Each tablet contains 130 mg theophylline, 24 mg ephedrine hydrochloride, and 8 mg phenobarbital

Each tablet contains 180 mg anhydrous theophylline (90 mg in the immediate release layer and 90 mg in the sustained release layer); 48 mg ephedrine hydrochloride (16 mg in the immediate release layer and 32 mg in the sustained release layer); and 25 mg phenobarbital in the immediate release layer.

Each 5 ml teaspoonful contains 32.5 mg theophylline, 6 mg ephedrine HCl, and 2 mg phenobarbital; the alcohol content is 15%.

See next page for brief summary.

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TEDRAL® Elixir

CAUTION: Federal law prohibits dispensing Tedral SA without prescription.

Description. Tedral: each tablet contains 130 mg theophylline, 24 mg ephedrine hydrochloride, and 8 mg phenobarbital.

Tedral SA: each tablet contains 180 mg anhydrous theophylline (90 mg in the immediate release layer and 90 mg in the sustained release layer); 48 mg ephedrine hydrochloride (16 mg in the immediate release layer and 32 mg in the sustained release layer); 25 mg phenobarbital in the immediate release layer.

Tedral Elixir: each 5 ml teaspoonful contains 32.5 mg theophylline, 6 mg ephedrine hydrochloride, and 2 mg phenobarbital; the alcohol content is 15%.

Indications. Tedral, Tedral SA, and Tedral Elixir are indicated for the symptomatic relief of bronchial asthma, asthmatic bronchitis, and other bronchospastic disorders. They may also be used prophylactically to abort or minimize asthmatic attacks and are of value in managing occasional, seasonal or perennial asthma.

Tedral SA (Sustained Action) offers the convenience of b.i.d. dosage.

Tedral Elixir is convenient for persons who may have difficulty in swallowing tablets.

These Tedral formulations are adjuncts in the total management of the asthmatic patient. Acute or severe asthmatic attacks may necessitate supplemental therapy with other drugs by inhalation or other parenteral routes.

Contraindications. Sensitivity to any of the ingredients; porphyria.

Warnings. Drowsiness may occur. PHENOBARBITAL MAY BE HABIT-FORMING.

Precautions. Use with caution in the presence of cardiovascular disease, severe hypertension, hyperthyroidism, prostatic hypertrophy, or glaucoma.

Adverse Reactions. Mild epigastric distress, palpitation, tremulousness, insomnia, difficulty of micturition, and CNS stimulation have been reported.

Average Dosage. *Prophylactic or Therapeutic.*

Tedral: Adults—One or two tablets every 4 hours. **Children**—(Over 60 lb) one-half the adult dose.

Tedral SA: Adults—One tablet on arising and one tablet 12 hours later. Tablets should not be chewed. **Children**—Not established for children under 12.

Tedral Elixir: Note: One teaspoonful is equivalent to *one-quarter* Tedral tablet.

Children—One teaspoonful per 30 lb body weight, every 4-6 hours, unless prescribed otherwise by physician. Should be given to children under 2 years of age only with extreme caution. **Adults**—One to two tablespoonfuls every four hours.

Supplied. Tedral: White, uncoated scored tablets in bottles of 24 (N 0047-0230-24), 100 (N 0047-0230-51) and 1000 (N 0047-0230-60). Also in Unit Dose—package of 10 x 10 strips (N 0047-0230-11).

Tedral SA: Double-layered, uncoated, coral/mottled white tablets in bottles of 100 (N 0047-0231-51) and 1000 (N 0047-0231-60). Also in Unit Dose—package of 10 x 10 strips (N 0047-0231-11).

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Report From KMA Cancer Committee—

A Special Radiation Oncology Center For Research Into Cancer Treatment and Diagnosis

YOSH MARUYAMA, M.D.*

A major goal of the Radiation Oncology Cancer Center Program is to improve the quality of cancer care for all patients in the region through its own and cooperative programs. It will:

1) provide special treatment and consultative resources for radiation cancer management, including evaluation and treatment with special beams, e.g. total body electron "bath" for mycosis fungoides, neutron therapy, and continuing care and rehabilitation, and

2) evaluate the use of multiple disciplines in cancer management and the promotion of close collaboration between different disciplines in cancer treatment.

The Radiation Therapy Oncology Center participates in cooperative national oncology protocol investigations. But it also has its own development programs for gynecologic tumors, Hodgkin's disease, lymphomas, and a variety of cancer problems requiring multidisciplinary, multimodality therapies, and the close cooperation with other disciplines.

Educational programs are important and we now conduct and will continue to conduct train-

ing programs in cancer management for medical students, interns, residents, and allied health personnel. Other programs are being developed for the continuing education of health personnel.

The basic Investigative Program will develop new and fundamental programs related to: 1) Radiosensitizers and Protectors, 2) Combined Chemo- and Radiotherapy, 3) Cell Repair Mechanisms, 4) Normal Tissue Response, 5) Solid Tumor Response, 6) Tumor Immunology and Monitors, 7) Cell Radiobiology, and 8) Neutron therapy. Of especial interest is the application of cell kinetic research to the use of combined modality therapy, and of neutron therapy using Californium-Cf-252 for cancer treatment. We will also study tumor localization using radioactive isotopes attached to pharmaceuticals and antibodies, and with computerized image enhancing methods.

The Center program is broad and includes both clinical and basic cancer research programs with clinical and laboratory research aimed to investigate the treatment of cancer using radiation and chemicals, and the accurate localization of tumor. What is urgently needed for more effective tumor therapy is new knowledge and methods of exploiting radiation effects both alone and in conjunction with a variety of adjuvants to more effectively treat the patient with cancer.

*From the Radiation Therapy Oncology Center, University of Kentucky Medical Center, Lexington.

CEA Conference Planned June 1-3 in Lexington

An International Conference on the Clinical Uses of Carcinoembryonic Antigen (CEA) will be held June 1-3 at the Hyatt Regency Conference Center in Lexington.

Over 50 internationally recognized speakers will participate in the three-day conference which is sponsored by the Ephraim McDowell Community Cancer Network, the University of Kentucky College of Medicine, Hoffman-La Roche, and the Division of Cancer Biology

and Diagnosis, National Cancer Institute.

Samuel O. Freedman, M.D., Montreal, will deliver the keynote address on Wednesday evening, June 1.

Registration for the meeting is \$75 (dinner is \$12.50 per person) and can be made by contacting Joy Greene, Continuing Education, University of Kentucky College of Medicine, Lexington, Kentucky 40506.

The **ALLBEE® with C** Scrapbook of Vitamin Facts & Fallacies

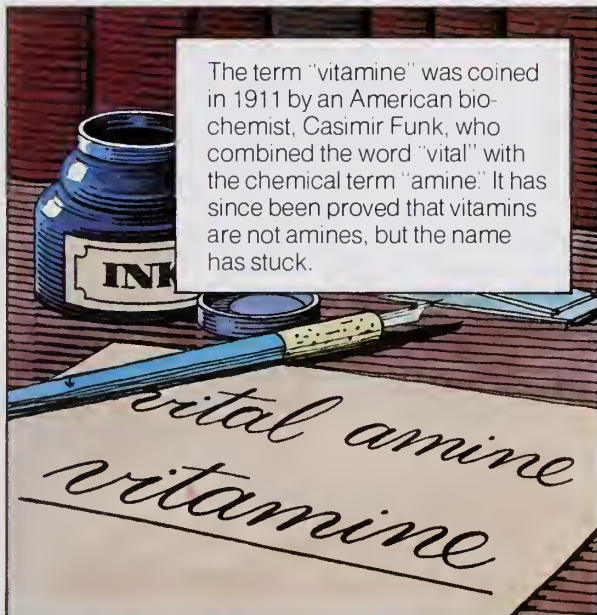
American Indians coveted fresh root tips and extracts of evergreen leaves in winter and onion-like bulbs and leaves in early spring to prevent the symptoms characteristic of vitamin C deficiency.



A tomato is botanically classified as a berry!



It is ironic that many of the vegetables highest in vitamin C and riboflavin are considered unappetizing by many people. These include turnip greens, kale, chard, mustard greens, spinach, water cress, broccoli and brussels sprouts.



The term "vitamine" was coined in 1911 by an American biochemist, Casimir Funk, who combined the word "vital" with the chemical term "amine." It has since been proved that vitamins are not amines, but the name has stuck.



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Spasm reactor?

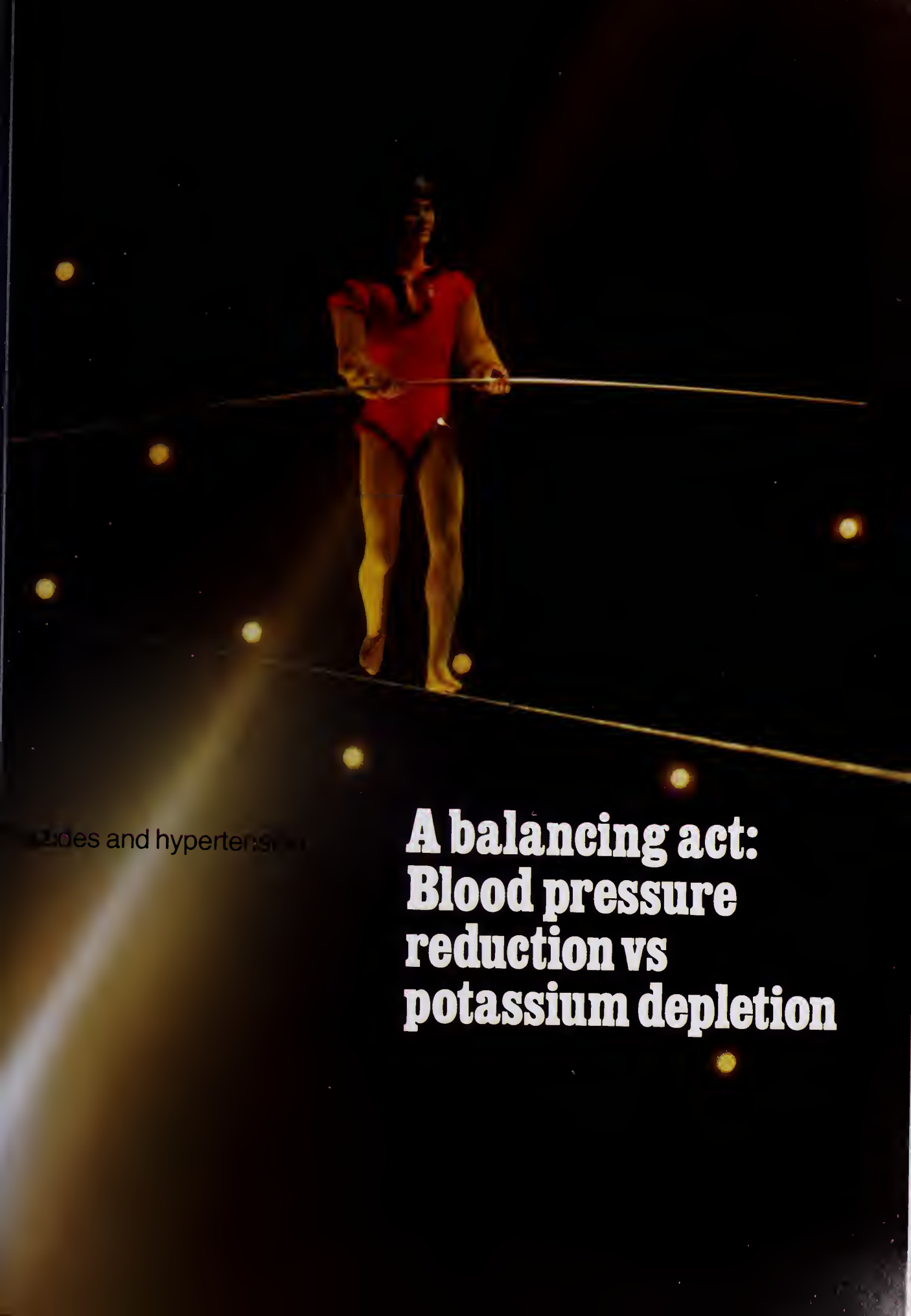
Donnatal®

| | each tablet, capsule or 5 ml tsp of elixir (23% alcohol) | each Donnatal No. 2 Tablet |
|--|---|----------------------------------|
| Phenobarbital (warning: may be habit forming) | ($\frac{1}{4}$ gr) 16.2 mg | ($\frac{1}{2}$ gr) 32.4 mg |
| Hyoscyamine sulfate | 0.1037 mg | 0.1037 mg |
| Atropine sulfate | 0.0194 mg | 0.0194 mg |
| Hyoscine hydrobromide | 0.0065 mg | 0.0065 mg |

Indications: Based on a review of this drug by the NAS/NRC and/or other information, FDA has classified the following indications as possibly effective: adjunctive therapy in the treatment of peptic ulcer; the treatment of the irritable bowel syndrome (irritable colon, spastic colon, mucous colitis) and acute enterocolitis. Final classification of the less-than-effective indications requires further investigation.

Brief summary. Contraindicated in patients with glaucoma, renal or hepatic disease, obstructive uropathy (for example, bladder neck obstruction due to prostatic hypertrophy) or a hypersensitivity to any of the ingredients. Blurred vision, dry mouth, difficult urination, and flushing or dryness of the skin may occur at higher dosage levels, rarely at the usual dosage.

A-H ROBINS A H Robins Company Richmond Virginia 23220



...des and hypertension

A balancing act: Blood pressure reduction vs potassium depletion

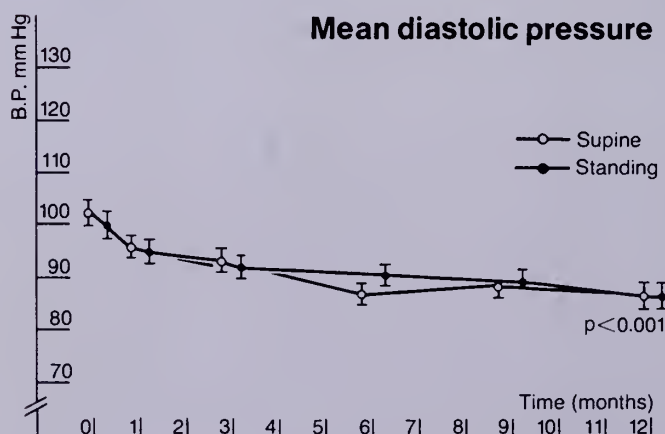
From a 1-year study of 18 patients
with mild uncomplicated
hypertension published in The Lancet*

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"The mean pretreatment blood pressure was 170/103 mmHg (supine) and 166/100 mmHg (standing). Diastolic pressure continued to fall over the first 6 months and then there was no further change up to 1 year...The mean blood pressure at 12 months was 153/88 mmHg (supine) and 142/88 mmHg (standing)."

"The patients were receiving a single daily dose of 10 mg bendrofluazide [bendroflumethiazide]...there were no apparent side effects from the medication."

*Wilkinson PR et al: The Lancet 1:759-762, 1975.



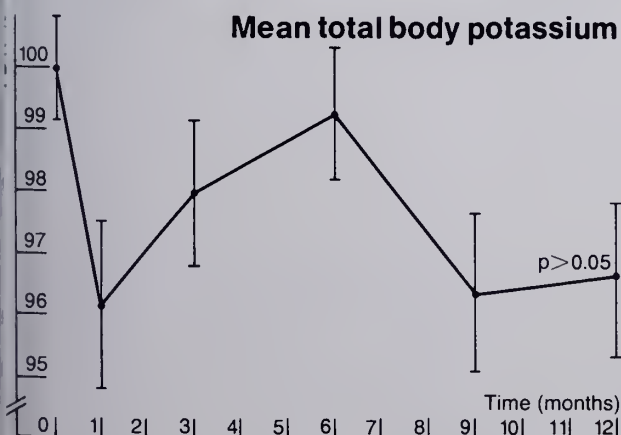
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Bendroflumethiazide Tablets N.F.

DESCRIPTION

Naturetin (Bendroflumethiazide Tablets N.F.) is a benzothiadiazine derivative containing a benzyl and a trifluoromethyl group. It is a potent oral diuretic and antihypertensive agent available as compressed tablets providing 2.5, 5.0, or 10 mg. bendroflumethiazide.

ACTIONS

The mechanism of action results in an interference with the renal tubular mechanism of electrolyte reabsorption. At maximal therapeutic dosage all thiazides are approximately equal in their diuretic potency. The mechanism whereby thiazides function in the control of hypertension is unknown.

INDICATIONS

Naturetin (Bendroflumethiazide Tablets N.F.) is indicated as adjunctive therapy in edema associated with congestive heart failure, hepatic cirrhosis and corticosteroid and estrogen therapy.

Bendroflumethiazide has also been found useful in edema due to various forms of renal dysfunction such as: nephrotic syndrome, acute glomerulonephritis, and chronic renal failure.

Naturetin (Bendroflumethiazide Tablets N.F.) is indicated in the management of hypertension either as the sole therapeutic agent or to enhance the effectiveness of other antihypertensive drugs in the more severe forms of hypertension.

Usage in Pregnancy. The routine use of diuretics in an otherwise healthy woman is inappropriate and exposes mother and fetus to unnecessary hazard. Diuretics do not prevent development of toxemia of pregnancy, and there is no satisfactory evidence that they are useful in the treatment of developed toxemia.

Edema during pregnancy may arise from pathological causes or from the physiologic and mechanical consequences of pregnancy. Thiazides are indicated in pregnancy when edema is due to pathologic causes, just as they are in the absence of pregnancy (see WARNINGS). Dependent edema in pregnancy, resulting from restriction of venous return by the expanded uterus, is properly treated through elevation of the lower extremities and use of support hose; use of diuretics to lower intravascular volume in this case is illogical and unnecessary. There is hypervolemia during normal pregnancy which is harmful to neither the fetus nor the mother (in the absence of cardiovascular disease), but which is associated with edema, including generalized edema, in the majority of pregnant women. If this edema produces discomfort, increased recumbency will often provide relief. In rare instances, this edema may cause extreme discomfort which is not relieved by rest. In these cases, a short course of diuretics may provide relief and may be appropriate.

CONTRAINDICATIONS

Bendroflumethiazide is contraindicated in anuria.

It is also contraindicated in patients who have previously demonstrated hypersensitivity to it or other sulfonamide-derived drugs.

WARNINGS

Bendroflumethiazide should be used with caution in severe renal disease. In patients with renal disease, thiazides may precipitate azotemia. Cumulative effects of the drug may develop in patients with impaired renal function.

Thiazides should be used with caution in patients with impaired hepatic function or progressive liver disease, since minor alterations of fluid and electrolyte balance may precipitate hepatic coma.

Thiazides may be additive or may potentiate the action of other antihypertensive drugs. Potentiation occurs with ganglionic or peripheral adrenergic blocking drugs.

Sensitivity reactions may occur in patients with a history of allergy or bronchial asthma.

The possibility of exacerbation or activation of systemic lupus erythematosus has been reported.

Usage in Pregnancy. Thiazides cross the placental barrier and appear in cord blood. The use of thiazides in pregnant women requires that the anticipated benefit be weighed against possible hazards to the fetus. These hazards include fetal or neonatal jaundice, thrombocytopenia, and possibly other adverse reactions which have occurred in the adult.

Nursing Mothers. Thiazides appear in breast milk. If use of the drug is deemed essential, the patient should stop nursing.

PRECAUTIONS

Periodic determination of serum electrolytes to detect possible electrolyte imbalance should be performed at appropriate intervals.

All patients receiving thiazide therapy should be observed for clinical signs of fluid or electrolyte imbalance; namely, hyponatremia, hypochloremic alkalosis, and hypokalemia. Serum and urine electrolyte determinations are particularly important when the patient is vomiting excessively or receiving parenteral fluids. Medication such as digitalis may also influence serum electrolytes. Warning signs, irrespective of cause, are: dryness of the mouth, thirst, weakness, lethargy, drowsiness, restlessness, muscle pains or cramps, muscular fatigue, hypotension, oliguria, tachycardia, and gastrointestinal disturbances such as nausea and vomiting.

Hypokalemia may develop with thiazides as with any other potent diuretic, especially with brisk diuresis, when severe cirrhosis is present, or during concomitant use of corticosteroids or ACTH.

Interference with adequate oral electrolyte intake will also contribute to hypokalemia. Digitalis therapy may exaggerate metabolic effects of hypokalemia especially with reference to myocardial activity.

Any chloride deficit is generally mild and usually does not require specific treatment except under extraordinary circumstances (as in liver disease or renal disease). Dilutional hyponatremia may occur in edematous patients in hot weather; appropriate therapy is water restriction, rather than administration of salt except in rare instances when the hyponatremia is life threatening. In actual salt depletion, appropriate replacement is the therapy of choice.

Hyperuricemia may occur or frank gout may be precipitated in certain patients receiving thiazide therapy.

Insulin requirements in diabetic patients may be increased, decreased, or unchanged. Latent diabetes mellitus may become manifest during thiazide administration.

Thiazide drugs may increase the responsiveness to tubocurarine.

The antihypertensive effects of the drug may be enhanced in the postsympathectomy patient.

Thiazides may decrease arterial responsiveness to norepinephrine. This diminution is not sufficient to preclude effectiveness of the pressor agent for therapeutic use. If emergency surgery is indicated, preanesthetic and anesthetic agents should be administered in reduced dosage.

If progressive renal impairment becomes evident, as indicated by a rising nonprotein nitrogen or blood urea nitrogen, a careful reappraisal of therapy is necessary with consideration given to withholding or discontinuing diuretic therapy.

Thiazides may decrease serum PBI levels without signs of thyroid disturbance.

ADVERSE REACTIONS

Gastrointestinal System: anorexia, gastric irritation, nausea, vomiting, cramping, diarrhea, constipation, jaundice (intrahepatic cholestatic jaundice), and pancreatitis. **Central Nervous System:** dizziness, vertigo, paresthesia, headache, and xanthopsia. **Hematologic:** leukopenia, agranulocytosis, thrombocytopenia, and aplastic anemia. **Dermatologic-Hypersensitivity:** purpura, photosensitivity, rash, urticaria, and necrotizing angitis (vasculitis, cutaneous vasculitis). **Cardiovascular:** orthostatic hypotension may occur and may be aggravated by alcohol, barbiturates or narcotics. **Other:** hyperglycemia, glycosuria, occasional metabolic acidosis in diabetic patients, hyperuricemia, allergic glomerulonephritis, muscle spasm, weakness, and restlessness.

Whenever adverse reactions are moderate or severe, thiazide dosage should be reduced or therapy withdrawn.

DOSAGE AND ADMINISTRATION

Therapy should be individualized according to patient response. This therapy should be titrated to gain maximal therapeutic response as well as the minimal dose possible to maintain that therapeutic response.

Diuretic: The usual dose is 5 mg. once daily, preferably given in the morning. To initiate therapy, doses up to 20 mg. may be given once daily or divided into two doses. A single daily dose of 2.5 to 5 mg. should suffice for maintenance.

Alternatively, intermittent therapy may be advantageous in many patients. By administering the preparation every other day or on a three to five day per week schedule, electrolyte imbalance is less likely to occur; however, the possibility still exists.

In general, the lowest dosage that achieves the therapeutic response should be employed.

Antihypertensive: The suggested initial dosage is 5 to 20 mg. daily. Maintenance dosage may range from 2.5 to 15 mg. per day, depending on the individual response of the patient. When the diuretic is used with other antihypertensive agents, lower maintenance doses for each drug are usually sufficient.

STORAGE

Store at room temperature; avoid excessive heat.

HOW SUPPLIED

2.5 mg. tablets in bottles of 100, 5 mg. tablets (scored) in bottles of 100 and 1000, and 10 mg. tablets (scored) in bottles of 100.

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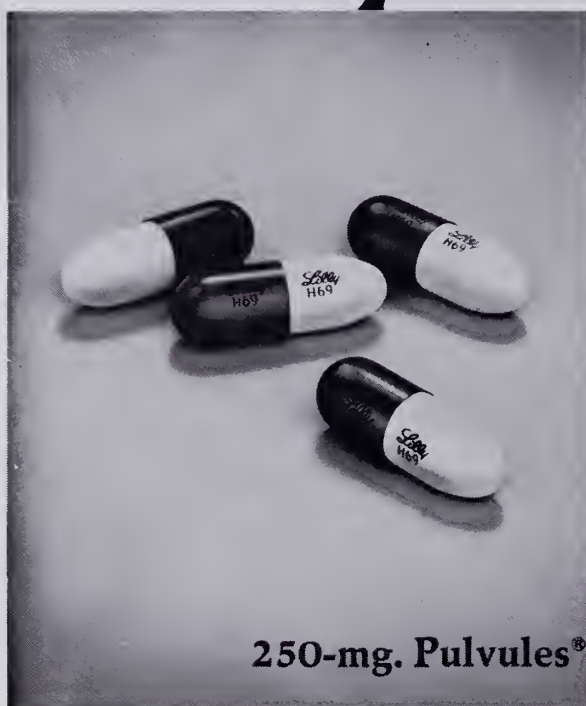
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Scoliosis Must Be Diagnosed Early†

R. W. GAINES, M.D., L. MERCER MCKINLEY, M.A., M.B., B.Ch., and
KENTON D. LEATHERMAN, M.D.

Louisville, Kentucky

Routine examination of the spine can lead to early diagnosis of scoliosis. A screening technique is described which will allow early identification of spinal deformity.

Incidence of Scoliosis from School Screening Surveys

RECENT school screening programs in California, Delaware, and Minnesota have suggested that 10% of sixth graders have minor scoliotic deformities, and that .4% of screened patients need immediate active scoliosis treatment, and that .1% need immediate surgical treatment.

These statistics emphasize the magnitude of the problem presented to the primary care physicians of Kentucky. A program of early diagnosis of scoliosis must be undertaken with the same vigor as that against cancer of the cervix and the breast. These programs have identified a widespread health problem in an older population group with impressive reductions in morbidity and mortality have been achieved by early diagnosis. Similar reductions in morbidity and mortality can be achieved through the early detection of spinal deformity but in a much younger age group and with far less investment of physician time. Large groups of patients can be screened by specially trained physical education teachers, nurses, physical therapists, or other paramedical personnel and identified cases referred for scoliosis consultation.

†From the Kosair Scoliosis and Spine Treatment Center, Kosair Hospital for Crippled Children, Louisville
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Differential Diagnosis of Scoliosis

The differential diagnosis of scoliosis includes over 35 different varieties. Although patients with all of these diseases are under treatment at the Kosair Scoliosis Treatment Center, three types—(1) idiopathic, (2) congenital, (3) paralytic—comprise the vast majority of cases. (Table 1)

Natural History of Untreated Curves

The natural history of untreated **idiopathic** scoliosis has been outlined by various scoliosis surgeons.¹⁻⁴ Their studies have shown:

- (1) that major progression occurs during the adolescent growth spurt (Fig. 1).
- (2) that many curves increase **after** the cessation of skeletal growth. (See the following article)
- (3) that the mortality rate for patients with idiopathic scoliosis is doubled.
- (4) a twentyfold increase in the incidence of disability compensation in scoliotic patients.
- (5) a sevenfold increase in the rate of dyspnea in scoliotic patients.
- (6) a complete absence of laboring workers in the scoliotic population.
- (7) a very high proportion of patients with psychological disability in the scoliotic group.

Similarly, the malignant potential of certain **congenital** scoliotic curvatures has been thoroughly documented.⁵⁻⁹ These papers have emphasized the progressive nature of the deformity and the cardiopulmonary decompensation and/or neurological compromise which can result from neglected, progressive curvatures. They have also

emphasized the susceptibility of these curves to correction. It has been demonstrated that even severe deformities are correctable.¹⁰

The dramatic disability from **paralytic** scoliosis has been recorded by numerous authors.¹¹⁻¹⁵ They have identified that paralysis from any cause leads to a long C-shaped curve which is relentlessly progressive so long as treatment is withheld. When allowed to progress to severe deformity, pulmonary decompensation from thoracic deformity is inevitable with an early demise.

Benefits of Early Diagnosis

IDIOPATHIC: Numerous studies have demonstrated that conservative treatment of idiopathic scoliosis is extremely effective. The Milwaukee Brace and other spinal orthoses can manage curves when they are identified with minor visible deformity. However, when obvious skeletal deformity is present at the time of diagnosis, surgical treatment is usually necessary. Early diagnosis of developing deformity from idiopathic scoliosis is essential to avoid surgical treatment.

CONGENITAL: Nasc¹⁶ and others have identified the relentless progression of untreated congenital scoliotic deformities. If identified early, a simple operative excision of extra vertebral segments or certain types of conservative therapy have been useful. Minor deformities can be surgically managed in a much less dangerous manner than is necessary when established deformities become rigidly fixed and spinal reconstruction is necessary.

PARALYTIC: Paralytic scoliosis results from muscular paralysis and the spine is always well aligned when the paralytic problem begins.

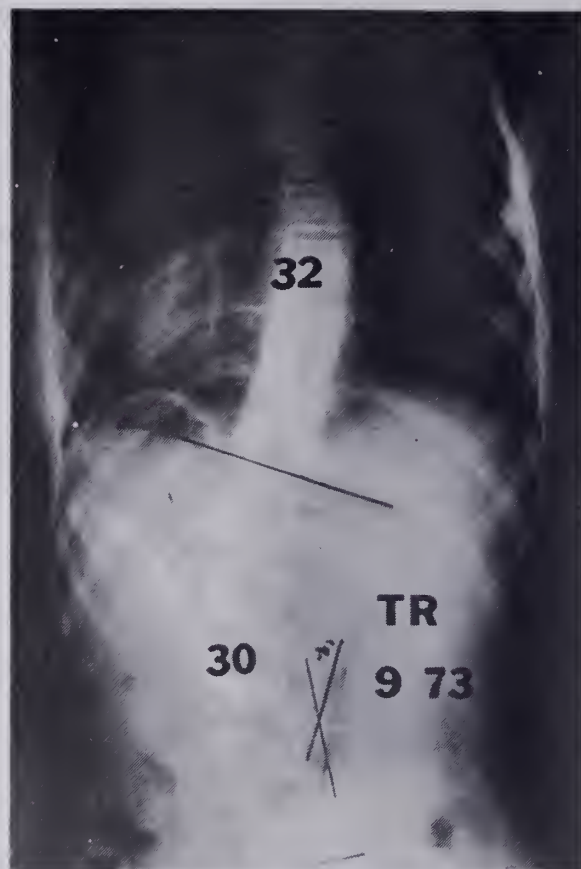


FIG. 1a. This 11-year-old girl had moderate curvature. Brace treatment would have resulted in a straight mobile spine but was withheld by the parents.

Awareness of the possible development of scoliosis will allow early preventive treatment. Spinal braces will prevent the development of curvature during growth and when growth is complete. Spinal fusion can be accomplished with little difficulty if the spine has been maintained in a relatively straight position during growth.

TABLE I

| | Etiology | Age at onset | Prognosis without early identification | Prognosis with early identification | Sex Predominance | Family History |
|------------|--|---|---|--|---------------------------------|--------------------------|
| Idiopathic | Intervertebral disc and growth plate abnormality | Usually adolescence but may be at any age | Guarded because of increasing deformity and lower back pain | Excellent management with conservative methods | Five to one female predominance | Very definitely positive |
| Congenital | Malformed osseous vertebral elements | Usually identified by age 3 | Poor because of cardiorespiratory or neurologic deficit | Excellent with simple surgical or conservative management | Neither sex | Usually negative |
| Paralytic | Abnormal spinal support because of muscular weakness | Begins when paralysis begins | Poor because of progressive spinal collapse leading to spinal decompensation and inability to sit | Excellent by relatively safe surgical procedures or conservative methods | None | Usually negative |

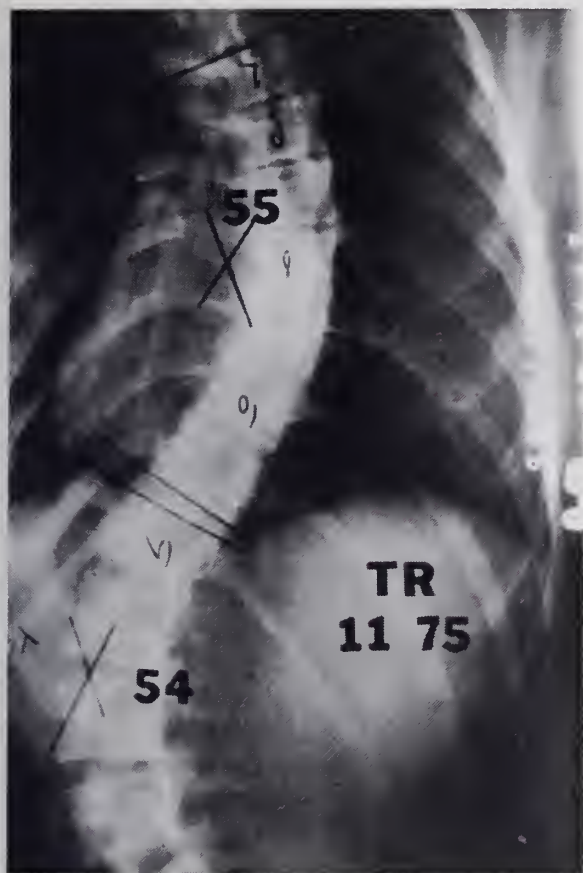


FIG. 1b. Two years later dramatic progression had occurred making surgical straightening and fusion of the areas of curvature necessary to avoid the late sequelae of scoliosis.

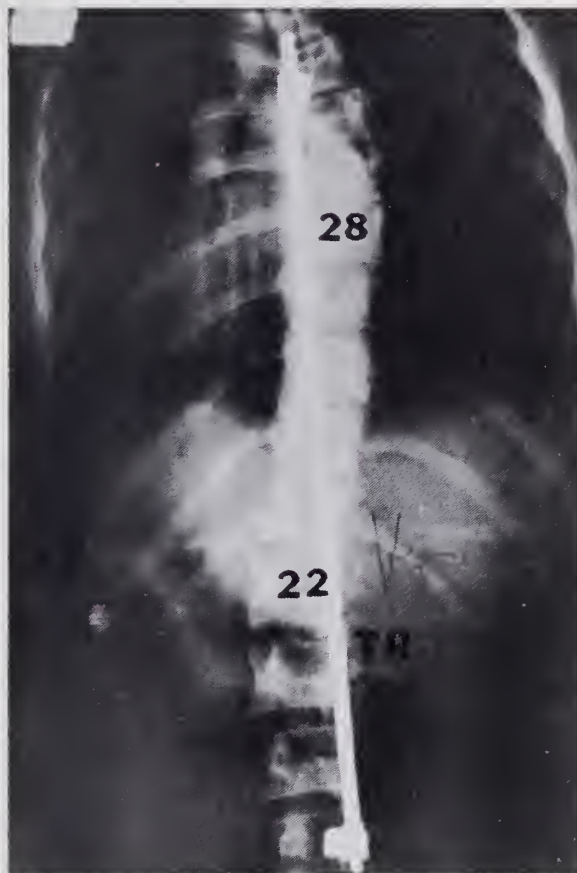


FIG. 1c. Excellent correction with spinal instrumentation has achieved spinal balance, marked improvement in rib cage and has eliminated the late sequelae of scoliosis.

Each type of scoliosis needs early recognition and established deformities should never be allowed to develop. Early conservative treatment will prevent deformity, and the cardiopulmonary, psychologic, and neurologic sequelae of established spinal deformity.

The Screening Examination

A high index of suspicion is necessary by all physicians to the problems of scoliosis. All age groups should be routinely examined to rule out the presence of scoliosis. The simple screening examination will identify spinal malalignment regardless of etiology and the most productive group for school screening is the sixth graders, but the Inspection and Bend Tests for spinal alignment should become a part of every child's physical examination.

The Inspection Test is performed with the patient standing erect, feet together, looking straight ahead. (Fig. 2) Signs of underlying spinal curvature include an uneven shoulder level, different

scapular prominence, uneven arm hanging pattern, a difference in hip prominence, or a position of spinal decompensation, (i.e. the head not symmetrically positioned over the pelvis).

The Bend Test requires the patient to bend forward, the arms and head are allowed to fall forward exposing the spine and paravertebral areas. These areas are checked for asymmetry. Even 5-8 degree curves can be detected.

This two-part examination can be accurately and carefully accomplished in less than 60 seconds, requires no special examination room or professional equipment, and is painless. It should become part of the routine school physical for all children.

Summary

Scoliotic curvatures are progressive deformities. A high index of suspicion and routine examination of the spine leads to early diagnosis, early institution of treatment and dramatically improved results. The morbidity of fixed scoliotic



FIG. 2. The Inspection Test. With the patient standing erect and unclothed, the spine is examined for symmetry.



FIG. 3. The Bend Test. The patient bends forward. The arms hang forward, moving the scapulae forward, making the paravertebral areas more obvious. Paravertebral asymmetry is more accurately identified. The earliest curves will only be identified with the Bend Test.

deformity, i.e. cardiopulmonary decompensation, psychologic and neurologic decompensation or back pain, should not be allowed to develop. A screening examination technique is described which will allow early identification of spinal deformity.

References

1. Nachemson, A., *Acta Orthopaedica Scandinavia*, 39: p. 466, 1968.
2. Nillsonne, U. and Lundgren, K. D., *Acta Orthopaedica Scandinavia*, 39: p. 456, 1968.
3. Collins, D. and Ponseti, I., *J. Bone & Joint Surg.*, 51-A, p. 425, 1969.
4. Bjure, J. and Nachemson, A., *Clinical Orthopaedics and Related Research*, Vol. 93, p. 44, 1973.
5. Kuhns, J. C. and Hormell, R. S., *Arch. of Surg.*, 65: p. 250, 1952.
6. MacEwen, G. D., et al, *Radiol.* 90: p. 711, 1968.
7. Shands, A. R. and Bundens, W. D., *Bull. Hospital of Joint Disease*, 17: p. 110, 1956.
8. Winter, R. B., et al, *J. Bone & Joint Surg.*, 50-A: p. 1, 1968.
9. Winter, R. B., et al, *Clinical Orthopaedics and Related Research*, Vol 93, p. 75, 1973.
10. Leatherman, K. D., paper presented at Scoliosis Research Society, Wilmington, Delaware, 1972.
11. Garrett, A., *Clinical Orthopaedics and Related Research*, 21: p. 117, 1961.
12. Hoffer, M., et al, *J. Bone & Joint Surg.*, 55-A: p. 137, 1973.
13. Bennett, C., et al, *J. Bone & Joint Surg.*, 58-A: p. 328, 1976.
14. Wilkins, K. E., et al, *J. Bone & Joint Surg.* 58-A: p. 24, 1976.
15. Hensinger, R., *J. Bone & Joint Surg.*, 58-A: p. 13, 1976.
16. Nasca, R., et al, *J. Bone & Joint Surg.*, 57-A, p. 456, 1975.

Adult Scoliosis: Recognition and Treatment†

L. MERCER MCKINLEY, M.A., M.B., B. CH., R. W. GAINES, M.D., and
KENTON D. LEATHERMAN, M.D.

Louisville, Kentucky

Efficient and effective treatment is available for adults with scoliosis and optimal management is achieved by early recognition of the problem during adolescence. The development of symptoms may be prevented by maintaining physiologic body weight and excellent spinal mechanics by daily muscle strengthening and spine flexibility exercises. Once symptoms develop, conservative treatment may afford relief and induce remissions. Surgery is often indicated to produce correction, stabilize the spine, and relieve pain.

SCOLIOSIS is not only a problem of young people. More and more adults with neglected spinal deformities come for treatment with deformities undiagnosed, untreated, or incorrectly treated during childhood or adolescence. Contrary to some beliefs curvatures do progress after skeletal maturity as shown in Figure 1.

Scoliosis in the adult decreases longevity for some patients but affects the quality of life in all.⁵ In a recent review of 112 adult patients with scoliosis from the Kosair Scoliosis Treatment Center, 80% complained of pain in the back which occasionally was very severe. The remainder complained of a deformity such as a prominent rib hump or kyphus which they found either cosmetically unsatisfactory or painful when resting against the back of a chair.

The etiology of the deformity was similar to that of the adolescent onset scoliosis. Idiopathic curves were the most common (66% of the patients.) Sixty percent came before the age of 30 years; 80% of patients had scoliosis, 15% had kyphoscoliosis, and 5% had kyphosis.

Twenty-four of 74 patients with idiopathic



FIG. 1a. 50 degree right thoracolumbar curve at age 18 years.

scoliosis believe that their deformity had increased during adulthood. Only ten of these had x-rays taken at or about the time of skeletal maturity and the average curve was 44 degrees and in six years it had increased to 60 degrees. One individual had a 45-degree curve which progressed to 95 degrees in only 13 years.

The outlook for this group is not good. Forty-seven percent of those examined showed that the spine was decompensated by an average of 3 cms. (The occiput was deviated 3 cms away from the weight bearing center of the pelvis.) This lack of symmetrical balance of the head and shoulders over the pelvis puts excessive stress on the discs in the lower spine. The asymmetrical stress causes pain and contributes to an increase in the curve. With severe kyphoscoliosis, paresis, or paralysis of the lower extremities, bladder and bowels can

†From the Kosair Scoliosis and Spine Treatment Center, Kosair Hospital for Crippled Children, Louisville
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occur due to spinal cord compression. In these cases neurological deficits may be the first complaint.

Treatment and Management

Conservative therapy was attempted in all those who initially complained of pain in the back. Treatment included analgesics, bedrest, bedrest with traction, spinal exercises, the Kosair thoracolumbar orthosis with axillary crutch type supports, plaster body jackets of the Calot or Cotrel type, anti-gravity casts, local heat, and ultrasound. Thirty percent of the patients treated in this way gained lasting symptomatic relief. Many gained temporary relief but later required more elaborate treatment such as progression from analgesics to a brace. Twenty percent of the conservatively treated group came to surgery. There appears to be no way to predict which patient will not respond to conservative treatment.

Patients with scoliosis must continue to do scoliosis exercises daily for the rest of their lives,³ to maintain good posture, muscle tone, and flexibility of the spine. However, even this may not

guarantee that symptoms and/or progression will not occur.

For those who had had previous scoliosis surgery or those who complained of a deformity of the back and for those who did not respond to conservative therapy, surgical intervention was recommended.

Surgical Treatment of Adult Scoliosis

PREVIOUSLY UNOPERATED PATIENTS

In previously unoperated adult patients, scoliotic deformities are commonly fixed and rigid and measures to increase flexibility were necessary. Prior to surgery preliminary Halo-Femoral traction was used in four cases where the curves exceeded 80 degrees. In six cases posterior osteotomy was required before posterior instrumentation and fusion, and in two cases a two-stage spinal reconstruction with anterior vertebral body resection and then posterior instrumentation and fusion was necessary.

In an attempt to decrease the morbidity, prophylactic antibiotics were used in all cases and



FIG. 1b. 95 degree right thoracolumbar curve, fifteen years later.



FIG. 1c. 40 degree curve following insertion of Harrington Rods and posterior spinal fusion.

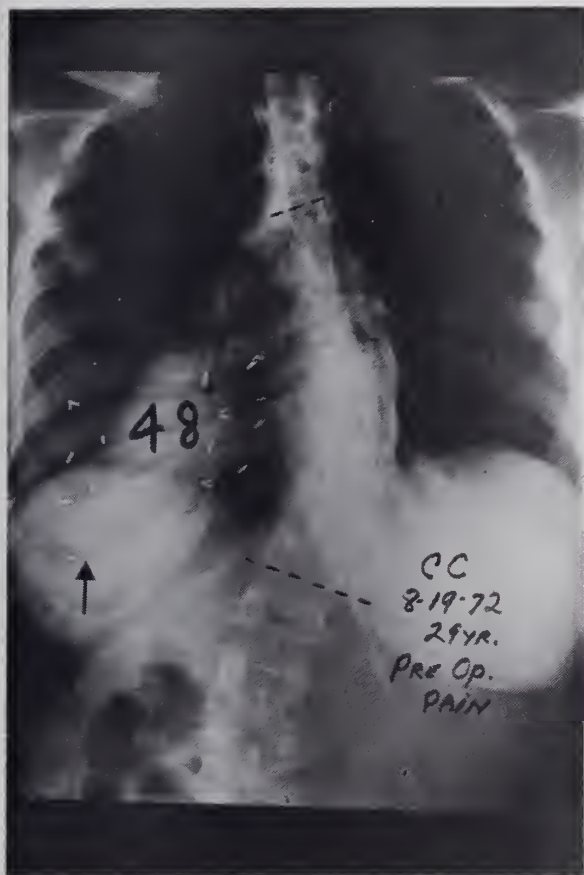


FIG. 2a. 48 degree curve, pain unsuccessfully treated with intercostal nerve neurectomies (see arrow).

meticulous skin care was instituted a week before surgery.

The results of surgical treatment are comparable to those of adolescent scoliosis.^{1,2,4} However, Ponder⁶ et al showed that blood loss and the pseudoarthrosis rate are greater in adults. We did not find that to be the case in our series.

PREVIOUSLY OPERATED PATIENTS

Those patients who had previous scoliosis fusions had a lower percentage of successful results. In all patients the mean correction was 45% of the preoperative curve.

There were no surgical complications in the previously operated idiopathic patients. However, in those with neuromuscular stroke paralytic scoliosis complications occurred. One patient lost 10 degrees of correction and another developed pseudoarthroses on two occasions, each requiring refusion. In one patient a bursa formed over the rod and this resolved after the rod was removed. One case did not respond to Halo-Femoral traction and a two-stage anterior body resection and posterior instrumentation was required to correct the deformity.⁷ One patient with a 48-degree

thoracic scoliosis had previously undergone two unsuccessful intercostal nerve neurectomies to obtain relief from intractable pain. However, posterior spinal fusion and Harrington instrumentation produced lasting relief of pain and a good correction of the deformity.

In the ten patients who had had previous scoliotic surgical procedures, the pain was usually directly ascribable to the previous surgery. Five had pseudoarthroses; two had rod bursae. In two the correction had been lost and the deformity was progressing. The average correction in this group was only 22% of the original curve and the complication rate was much higher, (20% in our series of ten patients). Two developed pseudoarthroses requiring refusion.

Summary

Efficient and effective treatment is available for scoliosis in adults.

The biomechanically unbalanced spinal column is vulnerable to trauma and loads placed upon it by the activities of daily living. Pain and deformity occur in patients who have fixed or flexible

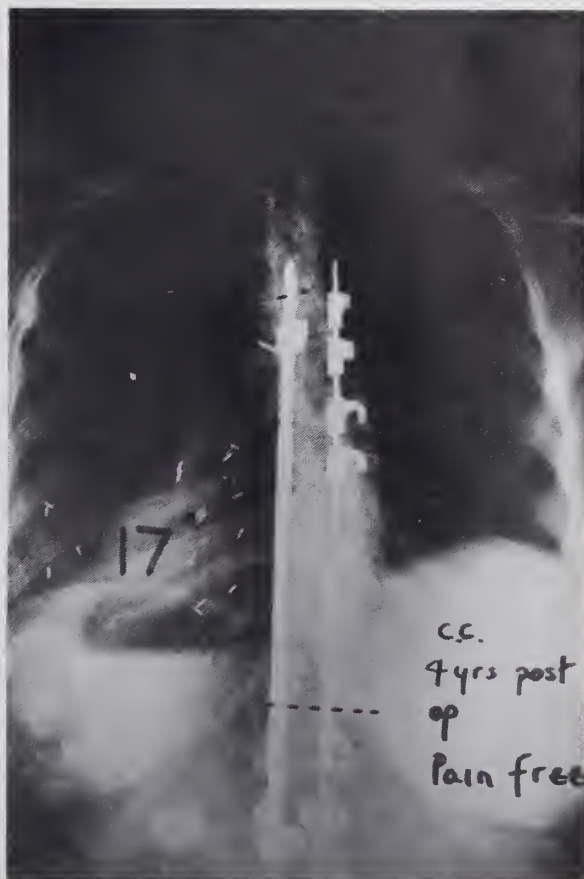


FIG. 2b. 17 degree right thoracic curve, post-op Harrington Instrumentation and posterior spinal fusion—pain relieved.

curves and surgical procedures produce excellent results if conservative treatment fails. The senior author (K.D.L.) has performed fusions for scoliosis in patients who were in their sixties and corrective procedures using Harrington rods in patients in their fifties.⁸ However, the majority presented in their twenties or thirties.

Curves in adults are less flexible than in adolescents and therefore the percentage of correction is less than in the adolescent. Occasionally these rigid spines require preliminary skeletal traction to increase flexibility, and occasionally two-stage⁷ spinal reconstructions are necessary. Complications are higher in the group who had previous surgery for scoliosis.

References

1. Bradford, D. S., Moe, J. H. and Winter, R. B., "Surgical Treatment of Scoliosis in the Adult," *Spine*, Ed. Rothman, R. H. and Simeone, F. A., Philadelphia, W. B. Saunders 1975.
2. Collis, D. K. and Ponsetti, I. V., "Long Term Follow-up of Patients with Idiopathic Scoliosis," *J. Bone & Joint Surg.*, 51-A, 425-445, April 1969.
3. Y. Cotrel, personal communication.
4. Dawson, E. G., Aryton, C. and Moe, J. H., "Management of Scoliosis in the Adult," *J. Bone & Joint Surg.*, 55-A, 437, March 1973.
5. Nachemson, A., "A Long Term Follow-up Study of Non-Treated Scoliosis," *Acta Orthop. Scandinavica* 39, 456-465, 1968.
6. Ponder, R. G., Dickson, J. H., Harrington, P. R. and Erwin, W. D., "Results of Harrington Instrumentation and Fusion in the Adult Idiopathic Scoliosis Patient," *J. Bone & Joint Surg.*, 57-A, 797-801 Sept. 1975.
7. Leatherman, K. D., "The Management of Rigid Spinal Curves," *Clinical Orthop.* 93, 215-224, 1973.
8. Leatherman, K. D., "Spinal Deformity in Adults," American Academy Meeting, New Orleans, La., Feb., 1976.

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EDITORIAL



Tales from Two Cities

IN the March 10, 1977, issue of *The Atlanta Journal*, columnist Gregory Jennisen comments on some current problems of the British bureaucracy. Among other interesting data he notes that "nearly one out of every three British workers is employed directly by government, national or local. The precise figure is 29 per cent." Attempts to curtail the every-increasing number of governmental employees have met with considerable resistance, especially from the unions and from the present Labor government's left wing. Alternate methods for cutting spending, for example ordering all government mail to be sent second class, have been proposed. And, continues Mr. Jennisen: "Already the state-run National Health Service has more administrators than doctors."

Date-line March 23, 1977, the Louisville *Courier-Journal*: Under the headline "Heal thy-

self" staff writer Joe Ward tells us about Keith W. Schnert, M.D., and his novel approach to health delivery. Doctor Schnert, author of the best seller, "How to be Your Own Doctor—Sometimes," was in Kentucky recently discussing his ideas about the "activated patient." In essence, the "activated patient" can accept at least part of the responsibility for maintenance of his health, is cognizant of good health habits, and learns to use health resources efficiently, including "when to go to the doctor . . . dealing with insurance and saving money on drugs and lab work."

Rising costs for medical care in this country is a fact of life. The proposals for economy are legion; yet a satisfactory solution has not arrived. Mr. Jennisen and Mr. Ward write of two approaches to the problem. I wonder which one makes better sense?

GRS

Letters to Editor

Dear Editor:

I sent this report to the KMA Board of Trustees and I thought that this information might be of interest to readers of the *KMA Journal*. Thank you.

William H. Matthew, M.D.
Daniel Boone Clinic
Whitesburg, Kentucky

Kentucky Hemophilia Advistory Committee

The committee has met twice at the Bureau of Health Services Building in Frankfort, and is made up of the following members: Donald Kmetz, M.D., Louisville, representing the Kentuckiana Chapter, National Hemophilia Foundation; Kenneth Ragland, Mt. Sterling, representing the Kentucky Hospital Association; Markel Kohn, D.D.S., Lexington, representing health care providers interested in hemophilia; Tom Young, Hopkinsville, representing family members of the hemophiliacs; W. H. Matthew, M.D., Whitesburg, representing the Kentucky Medical Association;

Herb Schlaughenhaupt, Jr., representing hemophiliac patients; Laine Marshall, R.P.H., Covington, representing the Kentucky Pharmaceutical Association; William P. McElwain, M.D., representing the Department of Human Resources.

At the first meeting, February 23, 1977, the following officers were chosen: Chairman—Doctor Kmetz, Vice-Chairman—Doctor Matthew, Secretary—Ms. Marshall.

At the second meeting, March 23rd, the committee discussed present treatment available for hemophiliacs in Kentucky and heard representatives from Kentucky Handicapped Childrens' Program and the Department of Human Resources.

At the next meeting to be held April 20th, the committee is to consider how to implement a statewide hemophiliac treatment program and make suggestions to the Department of Human Resources as to the best method to spend \$150,000 per annum allocated by the State of Kentucky for the Hemophiliac Program.

IN MEMORIAM

JOE M. BUSH, M.D.
Mt. Sterling
1905-1977

Joe Milbert Bush, M.D., Mt. Sterling, died on February 21 at the age of 72. Doctor Bush, a 1931 graduate of the University of Louisville School of Medicine, was a family physician. He was a member of the Kentucky Academy of Family Physicians and the Montgomery County Medical Society. Doctor Bush was also an emeritus member of the Kentucky Medical Association and the American Medical Association.

ROBERT L. REEVES, M.D.
Paducah
1914-1977

Robert Lee Reeves, M.D., 62, a Paducah internist, died on March 24. Doctor Reeves was a graduate of the University of Wisconsin at Madison and received his M.D. degree from the University of Louisville School of Medicine in 1940. Doctor Reeves belonged to the McCracken County Medical Society, the Kentucky Medical Association, and the American Medical Association.

C. ELLIOTT RAY, M.D.
Lexington
1949-1977

C. Elliott Ray, M.D., died on April 1 in Lexington. Doctor Ray, 27, had graduated from the University of Kentucky College of Medicine in 1975 and had recently established practice in Lexington. He was a past President of the University of Kentucky Student AMA Chapter and belonged to the Fayette County Medical Society and Kentucky Medical Association.

MALCOLM L. BARNES, M.D.
Louisville
1910-1977

Malcolm Lynn Barnes, M.D., a Louisville pathologist, died on April 9 at the age of 69. Doctor Barnes, a 1935 graduate of the University of Louisville School of Medicine, was Director of the International Clinical Laboratories in Louisville. He also directed laboratories and the research institute at Norton Infirmary and taught pathology at the University of Louisville.

A member of the Board of the American Society of Clinical Pathologists and the American College of Pathology, Doctor Barnes was named "American Clinical Scientist of the Year" in 1963 by the American Association of Clinical Scientists. He was a member of the Jefferson County Medical Society, as well as the Kentucky and American medical associations.

BRIEF SUMMARY OF PRESCRIBING INFORMATION

ANTIMINTH® (pyrantel pamoate) **ORAL SUSPENSION**

Actions. Antiminth (pyrantel pamoate) has demonstrated anthelmintic activity against *Enterobius vermicularis* (pinworm) and *Ascaris lumbricoides* (roundworm). The anthelmintic action is probably due to the neuromuscular blocking property of the drug.

Antiminth is partially absorbed after an oral dose. Plasma levels of unchanged drug are low. Peak levels (0.05-0.13 $\mu\text{g/ml}$) are reached in 1-3 hours. Quantities greater than 50% of administered drug are excreted in feces as the unchanged form, whereas only 7% or less of the dose is found in urine as the unchanged form of the drug and its metabolites.

Indications. For the treatment of ascariasis (roundworm infection) and enterobiasis (pinworm infection).

Warnings. *Usage in Pregnancy:* Reproduction studies have been performed in animals and there was no evidence of propensity for harm to the fetus. The relevance to the human is not known.

There is no experience in pregnant women who have received this drug.

The drug has not been extensively studied in children under two years; therefore, in the treatment of children under the age of two years, the relative benefit/risk should be considered.

Precautions: Minor transient elevations of SGOT have occurred in a small percentage of patients. Therefore, this drug should be used with caution in patients with preexisting liver dysfunction.

Adverse Reactions. The most frequently encountered adverse reactions are related to the gastrointestinal system.

Gastrointestinal and hepatic reactions: anorexia, nausea, vomiting, gastralgia, abdominal cramps, diarrhea and tenesmus, transient elevation of SGOT.

CNS reactions: headache, dizziness, drowsiness, and insomnia. Skin reactions: rashes.

Dosage and Administration. *Children and Adults:* Antiminth Oral Suspension (50 mg of pyrantel base/ml) should be administered in a single dose of 11 mg of pyrantel base per kg of body weight (or 5 mg/lb.); maximum total dose 1 gram. This corresponds to a simplified dosage regimen of 1 ml of Antiminth per 10 lb. of body weight. (One teaspoonful=5 ml.)

Antiminth (pyrantel pamoate) Oral Suspension may be administered without regard to ingestion of food or time of day, and purging is not necessary prior to, during, or after therapy. It may be taken with milk or fruit juices.

How Supplied. Antiminth Oral Suspension is available as a pleasant tasting caramel-flavored suspension which contains the equivalent of 50 mg pyrantel base per ml, supplied in 60 ml bottles and Unitcups™ of 5 ml in packages of 12.

More detailed professional information available on request.

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people recognize you.**

Highly effective
Single-dose convenience
Non-staining
Economical
Pleasant tasting

Antiminth[®]
(pyrantel pamoate)

equivalent to 50 mg pyrantel/ml
ORAL SUSPENSION



a drug of choice in
pinworm infections

Please see brief summary of prescribing information on facing page.

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RECENT CHANGES

federal register

**Providing
Drug Information
to Physicians**

**Informational
Bulletin #433-76**

**National
Health
Insurance**

**special report
Malpractice
insurance:**

**drug
bulletin**

**Health care doesn't
need more red tape**

**Drug firms challenge
'MAC' rules**

**Drug
Substitution**

**The Common Denominator
of Health Care
RESEARCH**

Mailgram 2

THERE ARE A LOT OF PEOPLE GETTING BETWEEN YOU AND YOUR PATIENT.

Medicine today is in the spotlight, subjected to all sorts of scrutiny. Your control over patient therapy is being monitored, judged and occasionally abrogated, sometimes by unknown third parties.

The worry is that in the wake of this focus, the relationship between you and your patient will be weakened, without offsetting benefits. Consider three examples:

Drug substitution In most states, pharmacy laws, regulations or professional custom stipulate that your generic prescriptions be filled with the precise product you prescribe. But in the last five years, a dozen or more State laws have been changed, permitting the pharmacist in most cases to select a product of the same generic drug to fill any prescription.

Ironically, this dilution of physician control has taken place against a background of growing evidence that purportedly equivalent drug products may be inequivalent, since neither present drug standards nor their enforcement are optimal. In fact, the FDA itself says it has not enforced the same standards for hundreds of "follow-on" products that it had applied to the original FDA approvals. Thus physician control over patient therapy is being eroded with a risk that patients may be exposed to drugs of uncertain quality.

The major advertised claim for substitution is reduced prescription prices for consumers. Yet no documentation of any significant savings has been produced.

MAC Maximum Allowable Cost, MAC for short, is a federal regulation designed to cut the Government's health care bill by setting price ceilings for drugs dispensed to Medicare and Medicaid patients. Unless the prescriber certifies on the prescription that a particular product is medically necessary, the Government intends to pay only the cost of the lowest-priced, purportedly-equivalent,

generally-available product. The effect of the program may be that elderly and indigent patients will be restricted to products which someone in Washington believes are priced right. Practicing doctors will have little to say about administration of the program, since Government will have absolute authority to make its choices stick.

The drug lag The future of drug and device research depends upon a scientific and regulatory environment that encourages therapeutic innovations. The American pharmaceutical industry annually is spending more than \$1 billion of its own funds and evaluating more than 1,200 investigational compounds in clinical research. Disease targets include cancer, atherosclerosis, viruses and central nervous system disorders, among others. But there is a major barrier to the flow of new drugs to your patients: The cost of the research is more than ten times what it was, per product, in 1962; and whereas governmental clearance of new drug applications took six months then, it commonly consumes two years now.

The FDA needs adequate time, of course, to consider data. But it is equally clear that the present approval process contributes to needless delay of needed therapy. That's why the increased efficiency of the drug approval process is vital to all our futures.

If these issues concern you, we suggest that you make your voice heard—among your colleagues and your representatives in State legislatures and in Washington.

It could make a difference in your practice tomorrow.



Pharmaceutical Manufacturers Association
1155 Fifteenth Street, N.W., Washington, D.C. 20005



MATERNAL MORTALITY



16-73. The patient was a 41-year-old, married, white, Gravida 5, Para 4, LNMP was April 25, 1973. She was seen in the emergency room at 9:30 a.m., June 23, 1973, complaining of vaginal bleeding that began the night before and had continued. She was confused and had no family member with her. Blood was seen running off the ambulance stretcher. Her pulse was 80, R 20, BP 104/78, and temperature 98.4. She was somewhat obese and extremely icteric. She was complaining of low abdominal pain. On pelvic examination massive clots were found in the vagina and membranes were present in the os.

Hemoglobin was 7.9, hematocrit, 20%, WBC 31,800, 33 segs., 57 bands, 3 melamylocytes, 5 nucleated red cells. No urine was obtained. Patient was taken directly from the emergency room to the operating room for a D & C. Blood was typed and cross-matched. She received 100 mg Demerol, 100 mg Nembutal, 1/50 gr Atropine for premedication, and general anesthesia. A semi-closed system with N₂O was started at 10:45 a.m. by a certified RN anesthetist. 1000 cc. 5% Dextrose in Ringers solution was running that contained 2 ampules of Pitocin. She vomited approximately 100 cc of coffee-colored emesis during the procedure. A large amount of slightly clotted decidual tissue was removed on D&C and a one-inch iodoform pack was inserted in the uterus and "because of the vaginal relaxation and prolapse" the vagina was packed.

A Foley catheter was inserted in the bladder yielding grossly dark bloody urine. The procedure began at 11:00; completed at 11:10; anesthesia finished at 11:15; and at 12:15 she was reacting and had no apparent complaints.

The IV was kept open with 5% Dextrose in Ringers solution until the blood was available. She received 50 mg Benadryl intravenously before starting the blood. A repeat CBC was ordered plus bilirubin, SGOT, and alkaline phosphatase. She was treated with Ampicillin 500 mg every 4 hours in addition to one gram added to the IV.

She received three more units of blood plus Solu Medrol by IV push. The Ampicillin was discontinued and she received Gentomycin 80 mg IV push; then every two hours Lasix was given (40 mg).

Some additional history was obtained from the patient and from a relative, who was obviously mentally retarded. It was learned the patient had not been well the preceding months. She had increasing jaundice for two weeks before she was admitted. Associated with this was increasingly dark urine. She complained of feeling weak; however, four days before admission she was well enough to hoe in the garden. She had been treated by a physician elsewhere, but not in the last four or five months. She had been diagnosed as having heart

disease and rheumatic fever. However, she hadn't been on any medication.

She was examined by a consultant after the D&C. Her blood pressure was probably 90 or less systolic; there was no definite auscultatory sound. Her pulse was palpable but weak, 140, R. 40, T. 100. She was exhibiting some air hunger. She responded to verbal stimuli slowly.

She was grossly jaundiced; her neck was supple; there was no adenopathy, thyroid enlargement or bruits. Her chest was clear; she had a tachycardia; no murmurs were heard.

The EKG was read as sinus tachycardia with anterior apical subendocardial injury. She had generalized guarding of her abdomen. The impression was septic abortion with disseminated intravascular coagulation; hepatitis and/or obstructive biliary disease and/or neoplasm was ruled out.

She had a sudden fall in her bedroom at approximately 8:00 p.m. There was an initial response with Aramine, then none; and she expired at 10:10 p.m. An autopsy was obtained.

The final diagnosis was acute terminal pulmonary edema; fatty changes in the liver; hydropic degeneration and cloudy swelling renal tubular epithelium; acute tubular necrosis; myometritis; exogenous obesity (estimated weight 190 lbs); marked generalized icterus; clinical history of incomplete abortion. The microscopic diagnosis from the uterus was degenerating decidual tissue. The uterus was described as enlarged to the size of a two to three month pregnancy. At autopsy, it was soft and boggy. The fallopian tubes and ovaries revealed no gross alteration.

The pathologist's comment was the findings were compatible with the diagnosis of sepsis and hemolysis resulting from incomplete abortion. There was no evidence to indicate primary hepatic disease as the cause of death.

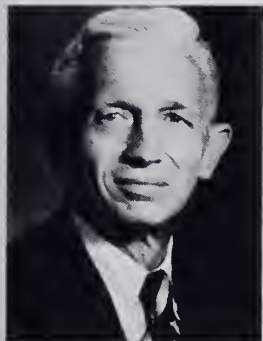
Comment

The Committee on Maternal Mortality classified this as an obstetrical death with preventable factors. It is felt that the patient was possibly overloaded with fluids and blood and that the central venous pressure should have been monitored. It is felt that perhaps local anesthesia should have been used rather than general in such a situation. The question also arose as to whether this was an induced abortion and since there was a history of her being sick for several days before admission, this is a distinct possibility. It is felt that the pathology is incomplete and that the terminal event was most likely pulmonary edema, which could have been avoided by a more careful monitoring of the fluids and blood given her.

ASSOCIATIONAL NEWS

Guest Speakers To Provide Outstanding Scientific Program At 1977 KMA Annual Meeting, September 27-29

The KMA Annual Meeting will again be highlighted by its scientific program, to be held September 27-29 at the Ramada Inn/Bluegrass Convention Center in Louisville. According to KMA President Paul J. Parks, M.D., Bowling Green, distinguished speakers from Kentucky and throughout the nation will participate in this year's annual session.



Doctor Bahnson

The KMA Scientific Program Committee, chaired by Richard F. Hench, M.D., Lexington, designed the program so that every medical specialty will be represented. Eighteen specialty groups will meet during the three-day session and a wide range of medical subjects, to include cardiovascular problems, cancer, and alcoholism, will be discussed by guests of the Association, specialty group speakers, and local physicians.

Speaking during the opening session, which will deal with cardiovascular problems, will be Henry T. Bahnson, M.D., Pittsburgh; Richard E. Kerber, M.D., Iowa City; and Samuel Kaplan, M.D., Cincinnati.

Doctor Bahnson, Professor and Chairman of the Department of Surgery at the University of Pittsburgh, will discuss "Coronary Artery Bypass." A Past President of the Society of University Surgeons, Doctor Bahnson is the Immediate Past President of the American Association for Thoracic Surgery. He is currently Treasurer of the International Society of Surgery and is a member of the International Cardiovascular Society.

Associate Professor, Cardiovascular Division at the University of Iowa Hospital, Doctor Kerber is a member of the Board of Directors of the American Society of Echocardiography. His topic for Tuesday morning's session is "Recent Developments in Echocardiography." A Fellow of the American College of Cardiology (Governor for Iowa, 1976-79), Doctor Kerber serves on the editorial boards of several journals, including the *Journal of Clinical Ultrasound* and *Cardiology Digest*.

Speaking on "Long-Term Results After Surgery for Congenital Heart Disease," Doctor Kaplan is Professor of Pediatrics and Associate Professor of Internal Medicine at the University of Cincinnati College of Medicine. A member of numerous scientific organizations both nationally and internationally, Doctor Kaplan also



Doctor Kerber



Doctor Kaplan

serves as Director of the Division of Cardiology at Children's Hospital in Cincinnati. He is a member of the editorial boards of *Circulation* and the *American Journal of Cardiology*.

Two meetings of the KMA House of Delegates (September 26 and 28), the President's Luncheon (September 28), a wide variety of scientific and technical exhibits, and the Annual Convention of the Auxiliary to KMA will also take place during the 1977 session.

Further details on other speakers and highlights of the 1977 KMA Annual Meeting will be published in upcoming issues of *The Journal* and "Communicator."

KMA Board Acts To Implement Medicare Resolution

Implementation of the Medicare resolution passed by the special meeting of the House in February was one of major agenda items of the April meeting of the KMA Board of Trustees.

A detailed action plan was outlined by the Board and has previously been reported to the House and to the full KMA membership through the KMA "Communicator."

The plan includes asking Metropolitan for additional statistical information to help KMA in establishing an equitable reimbursement mechanism; a visit with Kentucky's Congressional delegation, and a resolution introduced in the AMA House of Delegates asking for assistance at the national level on this problem.

Progress on the Medicare problem will be reported in future issues of *The Journal* and "Communicator."

CME Credit To Be Offered At 7th Emergency Care Seminar

The 1977 Emergency Medical Care Seminar, set for May 25-26 at the Ramada Inn/Bluegrass Convention Center in Louisville, will provide an excellent continuing education vehicle for physicians, nurses, dentists, and medical technicians.

Accreditation has been received from the American Medical Association (hour for hour), the Kentucky Academy of Family Physicians (6½ hours), National Registry of Emergency Medical Technicians (10 points), and the Kentucky Dental Association (5 points). CME credit has been applied for from the American College of Emergency Physicians, the Emergency Department Nurses Association, and the Kentucky State Association of Licensed Practical Nurses.

Focusing on the latest developments in emergency medical care, the Seventh Annual Seminar will include presentations dealing primarily with trauma and medical emergencies.

Gerald W. Shaftan, M.D., Brooklyn, Professor of Surgery at State University of New York, will be the featured luncheon speaker on May 25. Doctor Shaftan, who is also Chief of Trauma Services at Kings County Hospital Center, will talk on "Morals, Medical Ethics, and Management in the Multiply Injured Patient."

A cardiopulmonary resuscitation certification course sponsored by the American Red Cross on Wednesday afternoon has already reached maximum enrollment. However, a CPR recertification course will be offered on May 26 for those previously certified in CPR.

There is a \$15 registration fee for each day and pre-registration can still be made by contacting the Kentucky Medical Association.

Voluntary Records-Keeping Initiated by KMA for CME

At the last regular session of the House of Delegates voluntary participation in continuing education was endorsed and KMA was directed to assist the membership by helping individuals keep records of their CME activities, and to publicize CME meetings taking place. Mandatory CME was not felt to be warranted and the records-keeping procedure was directed to substantiate the amount of voluntary CME efforts being made.

In April the membership was advised of this program and was sent recording forms. The form is based generally on the AMA's Physicians' Recognition Award, and is divided into six categories: CME activities with accredited sponsorship, medical teaching, papers, publications, books and exhibits, non-supervised individual CME activities and other meritorious learning experiences.

Although there is no specific time limit for reporting these activities, the forms will be collected and recorded at the end of the year. Individuals are asked to record the number of hours spent in each activity and the total hours in each category. There are no requirements to complete any given number of hours.

This information will be compiled at the KMA office and will be available to each person reporting. Except by general reference none of this data will be otherwise released unless requested by the individual physician.

U.L. Alumni Activities Planned During KMA Meeting in Sept.

The University of Louisville Alumni Association is planning to hold an annual alumni meeting in the form of a reception during the KMA Annual Meeting on September 27 at the Plainview Swim and Racquet Club beginning at 5 p.m. The clubhouse is about five blocks from the convention site at 10335 Timberwood Road.

An information booth will also be set up in the exhibit area during the KMA meeting which will give alumni the opportunity to view upcoming plans at the Health Sciences Center and relate ideas concerning alumni affairs.

Five-year reunions are being planned during this time for ten graduating classes with the years ending in two and seven. For further information, contact Miss Billie Clary at the University of Louisville Health Sciences Center Alumni Office, 588-5783.



Trustees' Report

FIRST TRUSTEE DISTRICT

W. Eugene Sloan, M.D., Paducah

The First Trustee District of KMA is located in far western Kentucky. It is made up of the geographic area of Kentucky called the Jackson Purchase or the "Purchase" plus Livingston County.



Geographically, Kentucky is made up of three general areas: Appalachia, representing the Eastern quarter of the state; the Interior Low Plateaus, the area from Appalachia to the Tennessee River; and the Coastal Plain, made up of the eight westernmost counties of the state, identical with the Jackson Purchase.

The Jackson Purchase was engineered by Andrew Jackson in 1818, 11 years before he became President. The purchase was made from the Chickasaw Indians, one of the five civilized tribes.

The counties are Ballard, Calloway, Carlisle, Fulton, Graves, Hickman, McCracken, Marshall, and Livingston. There are hospitals in seven of the nine counties, with major hospitals in Calloway (Calloway County in Murray), Graves (Mayfield Community), and McCracken (Lourdes and Western Baptist in Paducah). Expansion is underway or recently completed in each of the major hospitals.

The profession is well represented by all specialties in the district with the single exception of cardiac surgery. Lourdes Hospital has been approved for a CAT Scanner, and Western Baptist has recently opened a cardiac catheterization laboratory. At least two of the hospitals in the First District have been delegated by KPRO as pilot hospitals.

Far western Kentucky was a hot bed of Southern

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ING IS

AS PRECIOUS

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YOU HAD YOUR HEAR

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COMFORTABLE HEARING

INVESTMENT OF A FEW MIN


Hearing losses are among the most consistently neglected health problems. Many people with them won't even admit it to themselves, let alone others. A little encouragement may start them thinking about themselves more realistically.

That's why we're offering you the poster shown here. You can hang it on the wall or stand it on a small table. It comes with booklets called "As precious as sight" that give your patients some basic facts about auditory testing and hearing losses and how easy they are to correct in many cases.

Write to us for your free poster and booklets. They just might help you to help some patients who aren't hearing as well as they used to. Even those who ordinarily wouldn't hear of it.

Professional Relations Division, Beltone Electronics Corporation
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Beltone
WHEN A HEARING
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WHEN
BURNING PAIN
COMPLICATES
ACUTE
CYSTITIS*

TURN IT OFF WITH

AZO GANTANOL

Each tablet contains 0.5 Gm sulfamethoxazole and 100 mg phenazopyridine HCl

FOR THE PAIN

- Quickly relieves painful symptoms such as burning and pain associated with urgency and frequency.
- Recommended antibacterial therapy: up to 3 days with Azo Gantanol, then 11 days with Gantanol (sulfamethoxazole).

Before prescribing, please consult complete product information, a summary of which follows:

Indications: In adults, urinary tract infections complicated by pain (primarily pyelonephritis, pyelitis and cystitis) due to susceptible organisms (usually *E. coli*, *Klebsiella*, *Aerobacter*, *Staphylococcus aureus*, *Proteus mirabilis*; and, less frequently, *Proteus vulgaris*) in the absence of obstructive uropathy or foreign bodies.

Note: Carefully coordinate *in vitro* sulfonamide sensitivity tests with bacteriologic and clinical response; add aminobenzoic acid to follow-up culture media. The increasing frequency of resistant organisms limits the usefulness of antibacterials including sulfonamides. Measure sulfonamide blood levels as variations may occur; 20 mg/100 ml should be maximum total level.

Contraindications: Children below age 12; sulfonamide hypersensitivity; pregnancy at term and during nursing period; because Azo Gantanol contains phenazopyridine hydrochloride it is contraindicated in glomerulonephritis, severe hepatitis, uremia, and pyelonephritis of pregnancy with G.I. disturbances.

Warnings: Safety during pregnancy not established. Deaths from hypersensitivity reactions, agranulocytosis, aplastic anemia and other blood dyscrasias have been reported and early clinical signs (sore throat, fever, pallor, purpura or jaundice) may indicate serious blood disorders. Frequent CBC and urinalysis with microscopic examination are recommended during sulfonamide therapy.

Precautions: Use cautiously in patients with impaired renal or hepatic function, severe allergy, bronchial asthma; in glucose-6-phosphate dehydrogenase-deficient individuals in whom dose-related hemolysis may occur. Maintain adequate fluid intake to prevent crystalluria and stone formation.

Adverse Reactions: Blood dyscrasias (agranulocytosis, aplastic anemia, thrombocytopenia, leukopenia, hemolytic anemia, purpura

FOR THE PATHOGENS

- Effectively controls susceptible pathogens such as *E. coli*, *Klebsiella*, *Aerobacter*, *Staph. aureus*, *Proteus mirabilis* and, less frequently, *Proteus vulgaris*.

*nonobstructed, due to susceptible organisms

hypoprothrombinemia and methemoglobinemia); allergic reactions (erythema multiforme, skin eruptions, Stevens-Johnson syndrome, epidermal necrolysis, urticaria, serum sickness, pruritus, exfoliative dermatitis, anaphylactoid reactions, periorbital edema, conjunctivitis and scleral injection, photosensitization, arthralgia and allergic myocarditis); G.I. reactions (nausea, emesis, abdominal pains, heartburn, diarrhea, anorexia, pancreatitis and stomatitis); CNS reactions (headache, peripheral neuritis, mental depression, convulsions, ataxia, hallucinations, tinnitus, vertigo and insomnia); miscellaneous reactions (drug fever, chills, toxic nephrosis with oliguria and anuria, periarteritis nodosa and L. E. phenomenon). Due to certain chemical similarities with some goitrogens, diuretics (acetazolamide, thiazides) and oral hypoglycemic agents, sulfonamides have caused rare instances of goiter production, diuresis and hypoglycemia. Cross-sensitivity with these agents may exist.

Dosage: Azo Gantanol is intended for the acute, painful phase of urinary tract infections. **Usual adult dosage:** 2 Gm (4 tabs) initially, then 1 Gm (2 tabs) B.I.D. for up to 3 days. If pain persists, causes more than infection should be sought. After relief of pain has been obtained, continued treatment with Gantanol (sulfamethoxazole) may be considered.

NOTE: Patients should be told that the orange-red dye (phenazopyridine HCl) will color the urine.

Supplied: Tablets, red, film-coated, each containing 0.5 Gm sulfamethoxazole and 100 mg phenazopyridine HCl—bottles of 100 and 500.

ROCHE

Roche Laboratories
Division of Hoffmann-La Roche Inc.
Nutley, New Jersey 07110

DYAZIDE

Trademark

® Each capsule contains 50 mg. of Dyrenium® (triamterene, SK&F Co.) and 25 mg. of hydrochlorothiazide.

MAKES SENSE FOR LONG-TERM CONTROL OF HYPERTENSION*

**LOWERS
BLOOD
PRESSURE**

**CONSERVES
POTASSIUM**

For more prescribing, see complete prescribing information in SK&F Co. literature or PDR. A full summary follows:

WARNING

This fixed combination drug is not indicated for initial therapy of edema or hypertension. Edema or hypertension requires therapy tailored to the individual patient. If the fixed combination represents the dosage so determined, its use may be more convenient in patient management. The treatment of hypertension and edema is not static, but must be reevaluated as conditions in each patient warrant.

Indications: When the fixed combination represents the dosage determined by titration: Adjunctive therapy in edema associated with congestive heart failure, hepatic cirrhosis, the nephrotic syndrome. Corticosteroid and estrogen-induced edema, idiopathic edema; hypertension, when potassium-sparing action of its 'Dyrenium' component is warranted.

Contraindications: Further use in progressive renal or hepatic dysfunction; hyperkalemia. Preexisting elevated serum potassium. Hypersensitivity to either component or other sulfonamide-derived drugs. Routine use of diuretics in otherwise healthy pregnancy.

Warnings: Do not use potassium supplements, dietary or otherwise, unless hypokalemia develops or dietary intake of potassium is markedly impaired. If supplementary potassium is needed, potassium tablets should not be used. Hyperkalemia can occur, and has been associated with

cardiac irregularities. It is more likely in severely ill patients with urine volume less than one liter/day, the elderly or diabetics, with suspected or confirmed renal insufficiency. Periodic determinations of serum K^+ should be made. If hyperkalemia develops, substitute a thiazide alone, restrict K^+ intake. The presence of a widened QRS complex or arrhythmia in association with hyperkalemia requires prompt additional therapy. Thiazides are reported to cross the placental barrier and appear in breast milk; fetal or neonatal hyperbilirubinemia, thrombocytopenia, altered carbohydrate metabolism and other adverse reactions that have occurred in the adult may result. When used in pregnancy or in women who might bear children, weigh potential benefits against possible hazards to fetus. Adequate information on use in children is not available.

Precautions: Do periodic serum electrolyte determinations (particularly important in patients vomiting excessively or receiving parenteral fluids). Periodic BUN and serum creatinine determinations should be made, especially in the elderly, diabetics, or those with suspected or confirmed renal insufficiency. Watch for signs of impending coma in severe liver disease. If spironolactone is used concomitantly, determine serum K^+ frequently; both can cause K^+ retention and elevated serum K^+ . Two deaths have been reported with such concomitant therapy (in one, recommended dosage was exceeded, in the other serum electrolytes were not properly monitored). Observe regularly for possible blood dyscrasias, liver damage, other idiosyncratic reactions. Blood dyscrasias have been reported in patients receiving Dyrenium® (triamterene, SK&F Co.), and

leukopenia, thrombocytopenia, agranulocytosis, and aplastic anemia have been reported with thiazides. Do periodic blood studies in cirrhotics to check for nondrug-related variations in blood pictures, and in patients with folic acid depletion, since 'Dyrenium' may contribute to appearance of megaloblastosis. Antihypertensive effect may be enhanced in post-sympathectomy patients. Use cautiously in surgical patients. The following may occur: transient elevated BUN or creatinine or both, hyperglycemia and glycosuria (diabetic insulin requirements may be altered), hyperuricemia and gout, digitalis intoxication (in hypokalemia), decreasing alkali reserve with possible metabolic acidosis. 'Dyazide' interferes with fluorescent measurement of quinidine.

Adverse Reactions: Muscle cramps, weakness, dizziness, headache, dry mouth; anaphylaxis, rash, urticaria, photosensitivity, purpura, other dermatological conditions; nausea and vomiting, diarrhea, constipation, other gastrointestinal disturbances. Necrotizing vasculitis, paresthesias, icterus, pancreatitis, xanthopsia and, rarely, allergic pneumonitis have occurred with thiazides alone.

Supplied: Bottles of 100 and 1000 capsules; Single Unit Packages of 100 (intended for institutional use only).

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sympathy during the Civil War and has always been a strongly Democratic area of the state. One of the most popular and effective of all Kentucky governors comes from this district, our current governor, Julian Carroll from McCracken County. He is a true friend of the medical profession.

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Charles B. Spalding, M.D., Bardstown

The Fourth District statistically is made up of the counties of Breckinridge, Bullitt, Grayson, Green, Hardin, Hart, Larue, Marion, Meade, Nelson, Taylor, and Washington and is located in the center of the state. The population of over 250,000 served by approximately 110 physicians. There are eight hospitals with a total of 518 beds. This does not include Ireland Army Hospital at Fort Knox with 314 beds. The second largest hospital, Hardin Memorial in Elizabethtown, has 166 beds and is planning expansion this year. Hardin County has 35 KMA members. Seven hospitals with capacities of 40 to 80 beds are located throughout the district. These are manned by surgeons and general practitioners and have served the area well. Other specialties are beginning to be represented slowly but steadily. As can be noted, the problems of small hospitals or lack of hospitals are the ones that most affect this region.

There are two multi-county societies: (1) Hardin—Larue and (2) Marion—Washington. These, however, have not received formal recognition as multi-county societies as of this date. Recruitment of physicians is still a major problem in most of the counties because of many socio-economic and medical reasons. Third party reimbursement levels also is a major factor in recruitment.

A letter will follow in the near future announcing the yearly District Meeting. I welcome and need the input from the physicians of this area to adequately serve your needs.



- 11 *Journal* Editors, Louisville
- 13 Kentucky Chamber of Commerce Annual Meeting, Louisville
- 14 Maternal and Child Care Committee, Louisville
- 15 Community and Rural Health Committee, Louisville
- 19 Drug Formulary Council, Frankfort
- 20 KEMPAC Workshop, Louisville
Judicial Council, Louisville
- 21 KMA-KNA Joint Practice Committee, Louisville
- 22 Jefferson County Medical Society Forum with Governor Carroll, Louisville
- 24-26 AMA-AAMSE New Medical Executive School, Chicago
- 26 Ad Hoc Committee on Primary Care, Louisville
- 26-27 Resident's Workshop, Louisville
- 28 Blue Cross-Blue Shield Board Meeting, Louisville

MAY

- 3 13th Trustee District Meeting, Ashland
- 4 15th Trustee District Meeting, Cumberland Falls
- 5-6 American Association of Medical Society Executive Board, Denver
- 9 *Journal* Editors, Louisville
- 12-14 Kentucky Academy of Family Physicians Annual Meeting, Louisville
- 13-15 Kentucky Society, American Association of Medical Assistants Annual Meeting, Gilbertsville
- 17 "Financial Control of Your Medical Practice" Workshop, Lexington
Continuing Medical Education Committee, Louisville
- 18 "Financial Control of Your Medical Practice" Workshop, Louisville
Cancer Committee, Louisville
Hospital Committee, Louisville
- 19 "Financial Control of Your Medical Practice" Workshop, Kenlake State Park
Advisory Committee to Blue Cross-Blue Shield, Louisville
Rural Kentucky Medical Scholarship Fund Board, Louisville
Board of Medical Licensure, Louisville
- 25-26 Emergency Medical Care Seminar, Louisville

Headquarters Activity

KMA had physicians and staff members in attendance at the following activities and events:

APRIL

- 2-5 Kentucky Dental Association Annual Meeting, Louisville
- 5 Interim Joint Committee on Labor and Industry, Frankfort
- 5-6 Auxiliary Board
- 6 Board of Medical Licensure Hearing on CME, Somerset
- 6-7 Board of Trustees, Louisville
- 7 Special Meeting, Board of Medical Licensure, Louisville



Committee Activity

Technical Advisory Committee on Physician Services (Title XIX)

March 30

The KMA Advisory Committee to Medical Assistance held a regular meeting on March 30 just prior to the meeting of the Medical Assistance Advisory Council.

In addition to other routine Committee functions, five recommendations were developed to present to the Council. It was recommended that Medicaid not reimburse physician extenders through health maintenance organizations unless all PE's are reimbursed regardless of the practice setting, that no Medicaid funds be spent on

patient education services because primary medical services aren't adequately funded, and that physicians be reimbursed at their full usual, customary, and reasonable rate.

A fourth recommendation sought to change Medicaid program guidelines to allow the transfer of patients in skilled nursing facilities to different level of care categories in emergency situations rather than admitting them first to an acute care hospital.

The Committee also asked that the list of lab procedures allowed in a physician's office be reviewed and expanded. The next meeting will be held in June by which time the Committee hopes to modify this list.



Members in the news

NEW MEMBERS

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Did you know . . .

KMA has been represented at least weekly at Interim Subcommittee meetings on administrative regulations, chiropractors, labor and industry, and business, organizations and professions.

May is meeting month at KMA. Multiple committee meetings are being held daily at the Headquarters Office. There were as many as 17 staff days for out-of-state meetings during the month and 23 are already scheduled for June.

KMA reviewed all providers listed in HEW's Medicare List of those who had received over \$100,000 in 1975. At time of press, ten groups, comprising 157 physicians, have responded and it has been learned that the approximately \$2 million reported by HEW as being paid to these providers actually works out to \$13,600 per doctor.

A KMA officer accompanied by staff testified before the Kentucky Drug Formulary Council about the generic drug law and generic drug prescribing on April 19.

Two KMA Trustee Districts recently held annual meetings. The **13th District**, represented by Howard B. McWhorter, M.D., Ashland, met on May 3 at the Bellefonte Country Club and the meeting featured a presentation by KMA President, Paul J. Parks, M.D. Harold L. Bushey, M.D., Trustee of the **15th District**, presided over the May 4th meeting of that District at Cumberland Falls. A scientific program, featuring a talk on "Essential Hypertension," by Gordon Guthrie, M.D., Associate Professor at the University of Kentucky College of Medicine; preceded dinner and an address by James B. Holloway, Jr., M.D., Chairman of the KMA Board of Trustees.

LOOK AHEAD

June 18-23, AMA Annual Convention, San Francisco

September 27-29, KMA Annual Meeting, Louisville



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—Horace Mann

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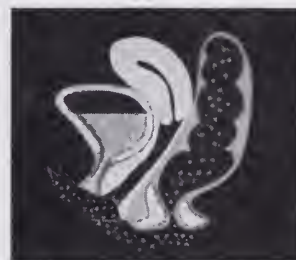
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For recurrent attacks of urinary tract infection in women

Bactrim™ DS Double Strength Tablets



Each tablet contains 160 mg trimethoprim and 800 mg sulfamethoxazole.

Just one tablet b.i.d. for 10 to 14 days

Action at urinary/vaginal/lower bowel sites helps eliminate reservoirs of infecting organisms

Distinctive antibacterial action plus wide spectrum helps eradicate recurrent UTI

Low incidence of bacterial resistance in community practice

■ Convenient *b.i.d.* dosage provides day-and-night antibacterial control

■ Contraindicated during pregnancy and the nursing period. During therapy, maintain adequate fluid intake; perform CBC's and urinalyses with microscopic examination.

Before prescribing, please consult complete product information, a summary of which follows:

Indications and Usage: For the treatment of urinary tract infections due to susceptible strains of the following organisms: *Escherichia coli*, *Klebsiella-Enterobacter*, *Proteus mirabilis*, *Proteus vulgaris*, *Proteus morganii*. It is recommended at initial episodes of uncomplicated urinary tract infections treated with a single effective antibacterial agent rather than the combination. Note: The increasing frequency of resistant organisms limits the usefulness of all antibacterials, especially in these urinary tract infections.

Also for the treatment of documented *Pneumocystis carinii* pneumonitis. To date, this drug has been tested only in patients 9 months to 16 years of age who were immunosuppressed by cancer therapy.

The recommended quantitative disc susceptibility method (Federal Register, 37:20527-20529, 1972) may be used to estimate bacterial susceptibility to Bactrim. A laboratory report of susceptible to trimethoprim-sulfamethoxazole indicates an infection likely to respond to Bactrim therapy. If infection is confined to the urine, "Intermediate susceptibility" also indicates a likely response. "Resistant" indicates that response is unlikely.

Contraindications: Hypersensitivity to trimethoprim or sulfonamides; pregnancy; nursing mothers; infants less than two months of age.

Warnings: Deaths from hypersensitivity reactions, agranulocytosis, aplastic anemia and other blood dyscrasias have been associated with sulfonamides. Experience with trimethoprim is much more limited but occasional interference with hematopoiesis has been reported as well as an increased incidence of thrombopenia with purpura in elderly patients on certain diuretics, primarily thiazides. Sore throat, fever, pallor, purpura or jaundice may be early signs of serious blood disorders. Frequent CBC's are recommended; therapy should be discontinued if a significantly reduced count of any formed blood element is noted.

Precautions: Use cautiously in patients with impaired renal or hepatic function, possible folate deficiency, severe allergy or bronchial asthma. In patients with glucose-6-phosphate dehydrogenase deficiency, hemolysis, frequently dose-related, may occur. During therapy, maintain adequate fluid intake and perform frequent urinalyses, with careful microscopic examination, and renal function tests, particularly where there is impaired renal function.

Adverse Reactions: All major reactions to sulfonamides and trimethoprim are included, even if not reported with Bactrim. **Blood dyscrasias:** Agranulocytosis, aplastic anemia, megaloblastic anemia, thrombopenia, leukopenia, hemolytic anemia, purpura, myelophthisic anemia and methemoglobinemia. **Allergic reactions:** Erythema multiforme, Stevens-Johnson syndrome, generalized skin eruptions, epidermal necrolysis, urticaria, serum sickness, pruritus, exfoliative dermatitis, anaphylactoid reactions, periorbital edema, conjunctival and scleral injection, photosensitization, arthralgia and allergic myocarditis. **Gastrointestinal reactions:** Glossitis, stomatitis, nausea, emesis, abdominal pains, enteritis, diarrhea and pancreatitis. **CNS reactions:** Headache,

peripheral neuritis, mental depression, convulsions, ataxia, hallucinations, tinnitus, vertigo, insomnia, apathy, fatigue, muscle weakness and nervousness. **Miscellaneous reactions:** Drug fever, chills, toxic nephrosis with oliguria and anuria, periarthritis nodosa and L. E. phenomenon. Due to certain chemical similarities to some goitrogens, diuretics (acetazolamide, thiazides) and oral hypoglycemic agents, sulfonamides have caused rare instances of goiter production, diuresis and hypoglycemia in patients; cross-sensitivity with these agents may exist. In rats, long-term therapy with sulfonamides has produced thyroid malignancies.

Dosage: Not recommended for infants less than two months of age.

Urinary Tract Infections: Usual adult dosage—1 DS tablet (double strength), 2 tablets (single strength) or 4 teasp. (20 ml) b.i.d. for 10-14 days.

Recommended dosage for children—8 mg/kg trimethoprim and 40 mg/kg sulfamethoxazole per 24 hours, in two divided doses for 10 days. A guide follows:

Children two months of age or older:

| Weight | | Dose—every 12 hours | |
|--------|-----|---------------------|--------------------------|
| lbs | kgs | Teaspoonfuls | Tablets |
| 20 | 9 | 1 teasp. (5 ml) | ½ tablet |
| 40 | 18 | 2 teasp. (10 ml) | 1 tablet |
| 60 | 27 | 3 teasp. (15 ml) | 1½ tablets |
| 80 | 36 | 4 teasp. (20 ml) | 2 tablets or 1 DS tablet |

For patients with renal impairment:

| Creatinine Clearance (ml/min) | Recommended Dosage Regimen |
|-------------------------------|----------------------------|
| Above 30 | Usual standard regimen |
| 15-30 | ½ the usual regimen |
| Below 15 | Use not recommended |

***Pneumocystis carinii* pneumonitis:** Recommended dosage: 20 mg/kg trimethoprim and 100 mg/kg sulfamethoxazole per 24 hours in equal doses every 6 hours for 14 days. See complete product information for suggested children's dosage table.

Supplied: Double Strength (DS) tablets, each containing 160 mg trimethoprim and 800 mg sulfamethoxazole, bottles of 100; Tel-E-Dose® packages of 100. Tablets, each containing 80 mg trimethoprim and 400 mg sulfamethoxazole—bottles of 100 and 500; Tel-E-Dose® packages of 100; Prescription Paks of 40, available singly and in trays of 10. Oral suspension, containing in each teaspoonful (5 ml) the equivalent of 40 mg trimethoprim and 200 mg sulfamethoxazole, fruit-licorice flavored—bottles of 16 oz (1 pint).



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Please see back cover.

Her next attack of cystitis may require

the Bactrim™

3-system counterattack



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The probability of recurrent urinary tract infection appears to be enhanced by the establishment of large numbers of *E. coli* or other urinary pathogens on the vaginal introitus. The trimethoprim component of

Bactrim diffuses into vaginal fluid in effective concentrations, thus combating migration of pathogens into the urethra.

Studies have shown that Bactrim acts against *Enterobacteriaceae* in the bowel without the emergence of resistant organisms. Thus, Bactrim reduces the risk of introcolonization by fecal uropathogens. It has *no* significant effect on other normal, necessary intestinal flora.

Bactrim fights uropathogens in the urinary tract/vaginal tract/lower intestinal tract

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June 1977
Volume 75
Number 6

Breast Cancer Symposium Reviewed;
Associational News Highlights
KMA Annual Meeting, April Board Meeting

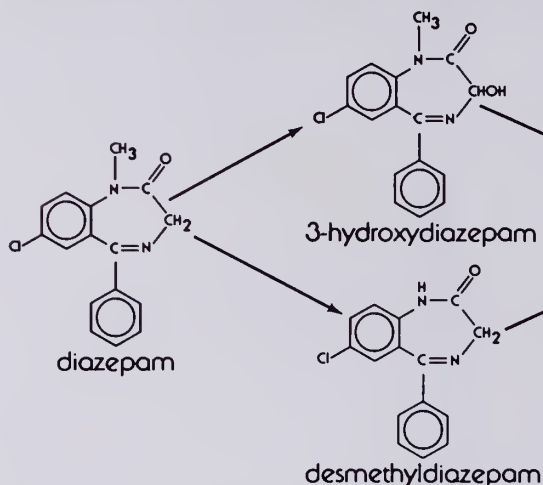
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The Journal Of The Kentucky Medical Association

A pharmacokinetic character all its own



Valium (diazepam) is a benzodiazepine with a distinctive pharmacokinetic profile

The pharmacokinetic profile of Valium is one of the characteristics that sets it apart from other benzodiazepines. Consider, in particular, the metabolic pathway of Valium. The three major metabolites of Valium exhibit significant pharmacologic activity—and so, of course, does the parent substance—diazepam itself. All combine to produce the characteristic clinical response seen with Valium. The response you have come to know, to want and to trust.

Pharmacokinetic studies also demonstrate that Valium has a pattern of absorption, distribution, metabolism and elimination that is reliable and consistent. And, although the pharmacokinetics of a drug cannot, at present, be specifically related to its clinical effects, it is clearly a factor that distinguishes one product from another by providing important insights into how each moves through the patient's body.

Valium® (diazepam) ^{IV}

2-mg, 5-mg, 10-mg scored tablets
a prudent choice in psychic
tension and anxiety

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Tension and anxiety states; somatic complaints which are concomitants of emotional factors; psychoneurotic states manifested by tension, anxiety, apprehension, fatigue, depressive symptoms or agitation; symptomatic relief of acute agitation, tremor, delirium tremens and hallucinosis due to acute alcohol withdrawal; adjunctively in skeletal muscle spasm due

to reflex spasm to local pathology; spasticity caused by upper motor neuron disorders; athetosis; stiff-man syndrome; convulsive disorders (not for sole therapy).

Contraindicated:

Known hypersensitivity to the drug. Children under 6 months of age. Acute narrow angle glaucoma;

may be used in patients with open angle glaucoma who are receiving appropriate therapy.

Warnings: Not of value in psychotic patients.

Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anticonvulsant medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms (similar to those with barbiturates and alcohol) have occurred following abrupt discontinuance (convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). Keep addiction-prone individuals under careful surveillance because of their predisposition to habituation and dependence.

Usage in Pregnancy: Use of minor tranquilizers during first trimester should almost always be avoided because of increased risk of congenital malformations as suggested in several studies. Consider possibility of pregnancy when instituting therapy; advise patients to discuss therapy if they intend to or do become pregnant.

Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed; drugs such as phenothiazines, narcotics, barbiturates, MAO inhibitors and other antidepressants may potentiate its action. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.

Side Effects: Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice, periodic blood counts and liver function tests advisable during long-term therapy.



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Volume 75 • June 1977

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MESSAGE FROM THE PRESIDENT



We probably hear more about the high cost of medical care today than any other single problem affecting medicine and the public. Almost daily the news media discusses the issue and committees are at work from the local to the national scene trying to decide what can be done to reduce medical care costs.

This is far too big a topic to discuss at length here but a few words regarding the physician's role in health costs seem appropriate. The first thought is that there is no easy solution when our patients want more and more services at less cost. Labor organizations want comprehensive coverage for their employees but want to spend less dollars for it. Patients are more knowledgeable about disease, diagnostic aids, rehabilitation procedures, sophisticated and complicated medical devices and want the very best for their care. They want to go to the hospital when they are ill (and many when they are not) and want to remain until they can return to work. They want expert medical, nursing, laboratory, dietary and attendant aid. Now they are wanting second and third opinions, if we are to believe the public press. Can all of this be made available at low cost?

You and I are blamed for the high cost of care because we generate so many of the charges. But we don't create diseases. The physician, like the patient, no longer wants to treat a suspected disease hoping for a cure without making a sure diagnosis and hence many expensive diagnostic procedures drive up medical care costs. If you were ill would you expect any less than your patients?

The old cliché is that if we want Cadillac medicine we must pay Cadillac prices. Generally this is true, but does every patient need Cadillac care? In the face of ever threatening liability suits can we afford to deny anyone such care, regardless of real need? Where does one draw the line and which patient is selected to receive less than the very best care? Can the very best care be given without high prices?

These are questions I'm sure physicians ask themselves every day. Each one has a slightly different answer. If we, the physicians, want to help reduce health care costs (even when many government-offered programs obviously do not) would we be leaders in the field by deciding what take-home pay we really need and base our charges on those needs? I would be interested in your response. Direct your reply to the Health Care Cost Committee of your Association.

Paul J. Parks

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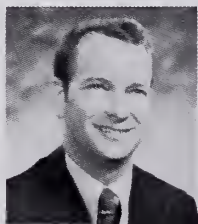
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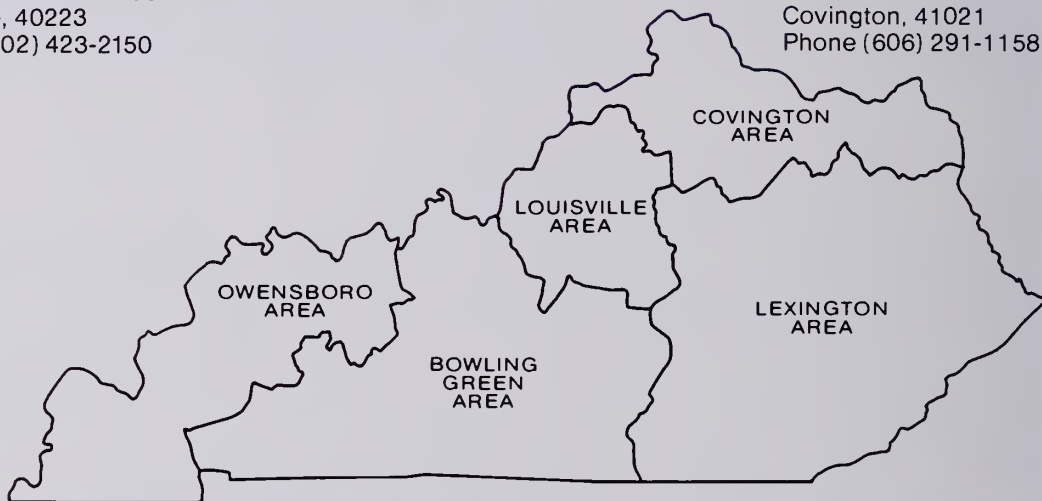
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Zaroxolyn (metolazone) is an antihypertensive indicated for the management of mild to moderate essential hypertension as sole therapy and in the more severe forms of hypertension in conjunction with other antihypertensive agents. Also, edema associated with cardiac and renal disease. **Contraindications:** Anuria, hepatic coma or precoma, allergy or sensitivity to Zaroxolyn. Or, as a routine in otherwise healthy pregnant women. **Warnings:** In patients with cross-allergy may occur in patients allergic to sulfonamide-derived drugs, thiazides, furosemide, or ethacrynic acid. Hypokalemia may occur, and is a potential hazard in digitalized patients; arrhythmias may occur. Hypokalemia and hyperuricemia may be noted or exacerbated. Considerable potentiation may occur when given concurrently with furosemide. Use with potassium-sparing diuretics. Use with potassium retention and hyperkalemia. Administration to women of childbearing

age requires that potential benefits be weighed against possible hazards to the fetus. Zaroxolyn appears in the breast milk. Not for pediatric use.

Precautions: Perform periodic examination of serum electrolytes, BUN, uric acid, and glucose. Observe patients for signs of fluid or electrolyte imbalance. These determinations are particularly important when there is excessive vomiting or diarrhea, or when parenteral fluids are administered. Patients treated with diuretics or corticosteroids are susceptible to potassium depletion. Caution should be observed when administering to patients with gout or hyperuricemia or those with severely impaired renal function. Hyperglycemia and glycosuria may occur in latent diabetes. Chloride deficit and hypochloremic alkalosis may occur. Orthostatic hypotension may occur. Dilutional hyponatremia may occur in edematous patients in hot weather.

Adverse Reactions: Constipation, nausea, vomiting, anorexia, diarrhea, bloating, epigastric distress, intrahepatic cholestatic jaundice, hepatitis, syncope, dizziness, drowsiness, vertigo, headache, orthostatic hypotension, excessive volume depletion, hemoconcentration, venous thrombosis, palpitation, chest pain, leukopenia, urticaria, other skin rashes, dryness of mouth,


hypokalemia, hyponatremia, hypochloremia, hypochloremic alkalosis, hyperuricemia, hyperglycemia, glycosuria, raised BUN or creatinine, fatigue, muscle cramps or spasm, weakness, restlessness, chills, and acute gouty attacks.

Usual Initial Once-Daily Dosages: mild to moderate essential hypertension—2½ to 5 mg; edema of cardiac failure—5 to 10 mg, edema of renal disease—5 to 20 mg. Dosage adjustment may be necessary during the course of therapy.

How Supplied: Tablets, 2½, 5 and 10 mg

References:

1. Dornfeld L, Kane R: Metolazone in essential hypertension. The long-term clinical efficacy of a new diuretic. *Curr Ther Res* 18: 527-533, 1975
2. Data on file, Medical Department, Pennwalt Prescription Products.

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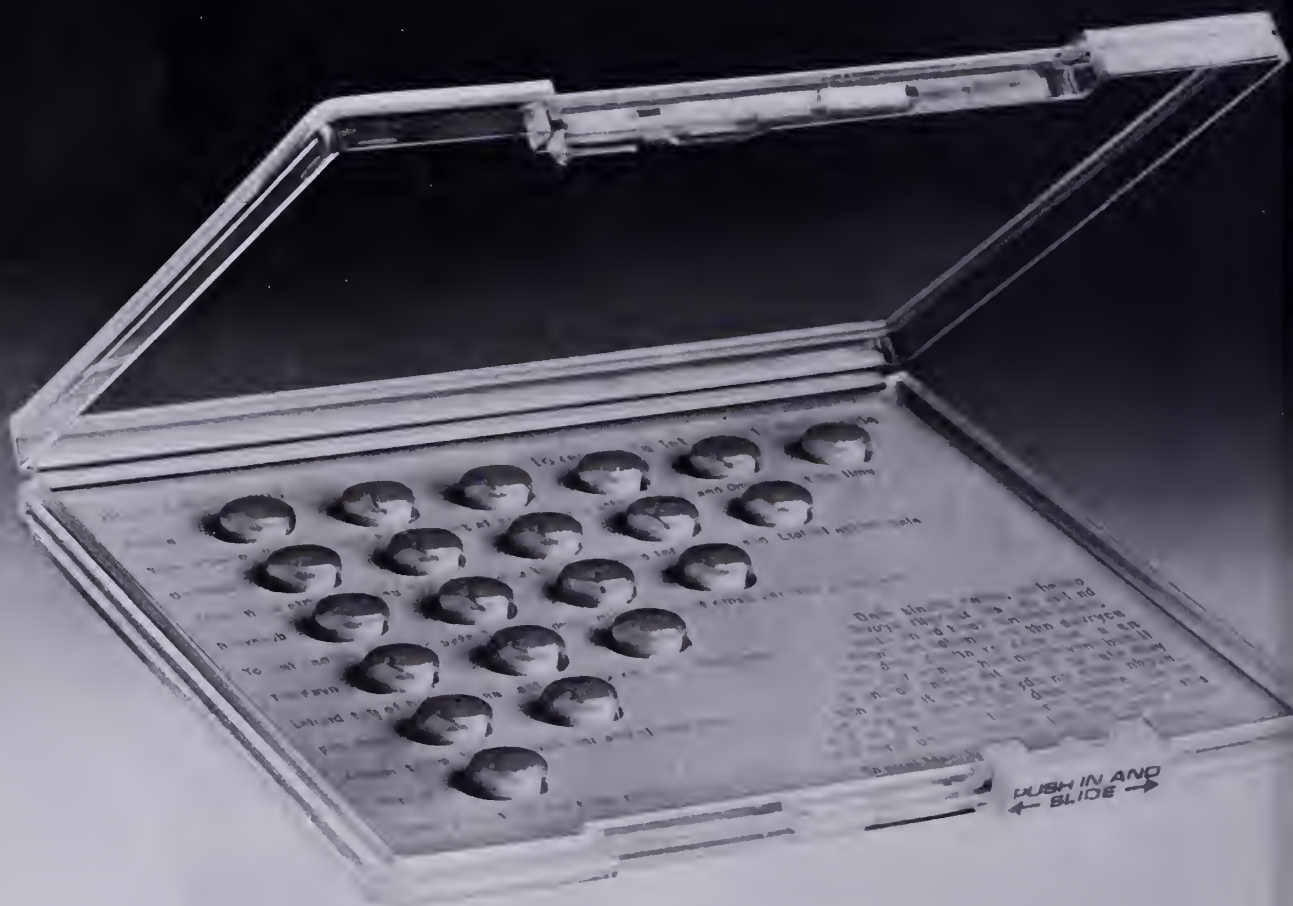
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Postgraduate Opportunities

IN KENTUCKY

JUNE

- 14 "Current Antibiotic Therapy," 7 p.m., sponsored by the Letcher County Medical Society, Whitesburg Appalachian Regional Hospital, Whitesburg

JULY

- 14 KMA Leadership Conference, Hyatt Regency, Lexington

SEPTEMBER

- 16-17 Fiberoptic Bronchoscopy Workshop, University of Kentucky Medical Center, Fee: \$200.
26-29 KMA Annual Meeting, Ramada Inn/Bluegrass Convention Center, Louisville

State to Sponsor Program On Alcohol, July 17-22

The Seventh Annual Kentucky School of Alcohol Studies will be held July 17-22 at Morehead State University, Morehead. Noted authorities from Kentucky and various parts of the United States will take part in the program which is sponsored by the Bureau for Health Services.

Ruth Maxwell, author of *The Booze Battle*, will be the featured speaker for the opening Banquet on July 17. For registration information, contact Glenna S. Snowden, Special Projects Coordinator, Bureau for Health Services, 275 E. Main St., Frankfort 40601 or call (502) 564-7450.

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Letters To The Editor

The Letters To The Editor column is a means for the KMA physicians to express their opinions and viewpoints on varied topics. If you have an item you would like brought before your fellow practitioners, please submit it to Letters To The Editor, Kentucky Medical Association, 3532 Ephraim McDowell Dr., Louisville, Kentucky 40205. Communications should not exceed 250 words. The right to abstract or edit is reserved by the editors of *The Journal*. Names will be withheld upon request, but anonymous letters will not be accepted.

Dear Editor:

Many people who are allergic to aspirin also are allergic to Tartrazine—especially those over 40 with the symptom complex of nasal polyps and asthma. Recent evidence suggests that aspirin sensitivity with or without nasal polyps may be present in children and adults with intrinsic asthma. In fact, some severe asthmatics may be sensitive to aspirin without realizing it.

It has been estimated that 25-80% of those individuals allergic to aspirin are also allergic to Tartrazine (yellow dye FD&C #5), which is present in some foods, and it is also present in some drugs. Many patients, as well as physicians are not aware of this.

One such example is the pain reliever, Tylenol, which has been used as an aspirin substitute since it contains no aspirin, nor any Tartrazine. However, the medication Co-Tylenol does contain Tartrazine. I became aware of this fact because of a patient who was referred to me for angiodema and urticaria.

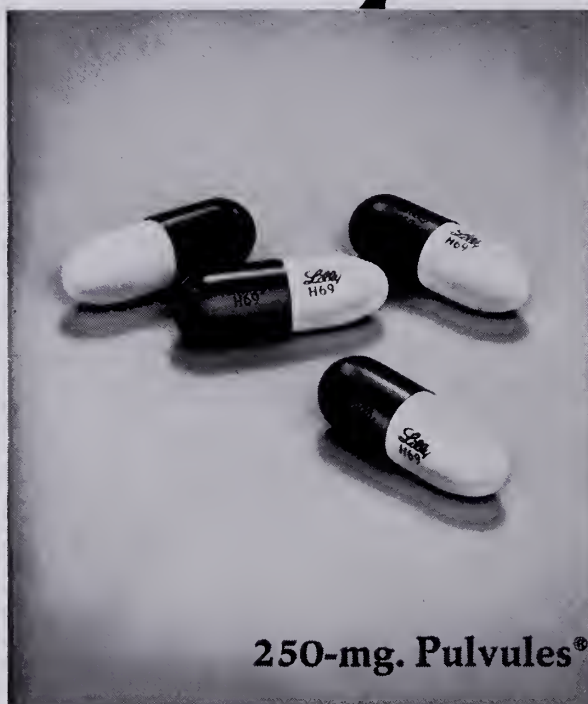
History revealed that aspirin had been taken just prior to the onset of the urticaria and the angiodema. Elimination of the aspirin resulted in the elimination of symptoms. He was given a list of drugs containing aspirin to avoid and also a list of drugs and foods containing Tartrazine. He was told he could use Tylenol.

The patient returned last week with severe angiodema and urticaria. He had not taken any aspirin, but he had taken Co-Tylenol. On the list of drugs I had given him this was not mentioned. The company which manufactures Co-Tylenol did not give a list of their drugs which contained Tartrazine. A new list has just come out which does list the drugs containing Tartrazine—Co-Tylenol is one of these drugs. Tartrazine was not listed on the label of the Co-Tylenol as one of the ingredients.

This could cause very severe reactions to someone allergic to Tartrazine—knowing that they could take Tylenol. The similarity of names, Tylenol and Co-Tylenol is very confusing and could be dangerous.

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VOLUME 75

JUNE 1977

NUMBER 6

Fungal Disease in Kentucky† Clinical Manifestations Similar to Pulmonary Tuberculosis

E. W. CHICK, M.D., M. L. DILLON, M.D., F. D. DANIELL, M.D., AND SUZANNE
COMPTON, B.S., M.T.

Paris, Kentucky

*Experiences of the Clinical Mycology Unit
at the Region D Respiratory Disease Hos-
pital in Paris from 1973-1975 are presented.*

KENTUCKY lies in the heart of the endemic area for histoplasmosis¹ and is one of the top ranking states in cases of blastomycosis.² With increasing awareness of the incidence of these pulmonary diseases, their fatality rate when untreated, and the diagnostic difficulties they present, the Respiratory Disease Branch, Division for Remedial Health Services, in the Department for Human Resources established a Clinical Mycology Unit in the Respiratory Disease Hospital (now State Mycology Center) at Paris. The Unit's function is to centralize expertise in the diagnosis and treatment of pulmonary fungal infections.

Since the Unit opened in March, 1973, 103 cases of histoplasmosis have been admitted to the Unit. In addition, there have also been 19 cases of aspergillosis, five cases of blastomycosis and three cases of nocardiosis. It is felt that the epidemiological features of these cases, i.e., geographic distribution, age, sex, occupation, might assist physicians within the state in looking at the prevalence of fungal cases within their own practices.

Histoplasmosis

Ninety-five patients were diagnosed as having histoplasmosis. Of those, 78 were culturally proven. The remaining 17 were diagnosed on the basis of positive serology and clinical impression; ten of those were considered to have inactive disease. Of the 85 patients with active disease, 70 received a full course of Amphotericin B (at least 2.5 gms or 1.0 mg/kg body weight), 12 received an incomplete course of therapy (varying from 250 mgs to 1200 mgs) and three received no specific antifungal treatment.

The average age was 51.3 years, with a range from 6 to 79 years. Figure 1 shows the predominance of cases were over 40, with 70 percent of the cases occurring between the ages of 41 and 65. Thirty percent of the cases were 61 years or older.

In this series histoplasmosis occurred predominantly in males (80%). Ninety-seven percent of the cases were white. Table 1 lists the occupation of each case. However, it should be kept in mind that most of these patients live in a rural or semi-rural setting. Their county of residence at time of admission is shown in Figure 2.

Aspergillosis

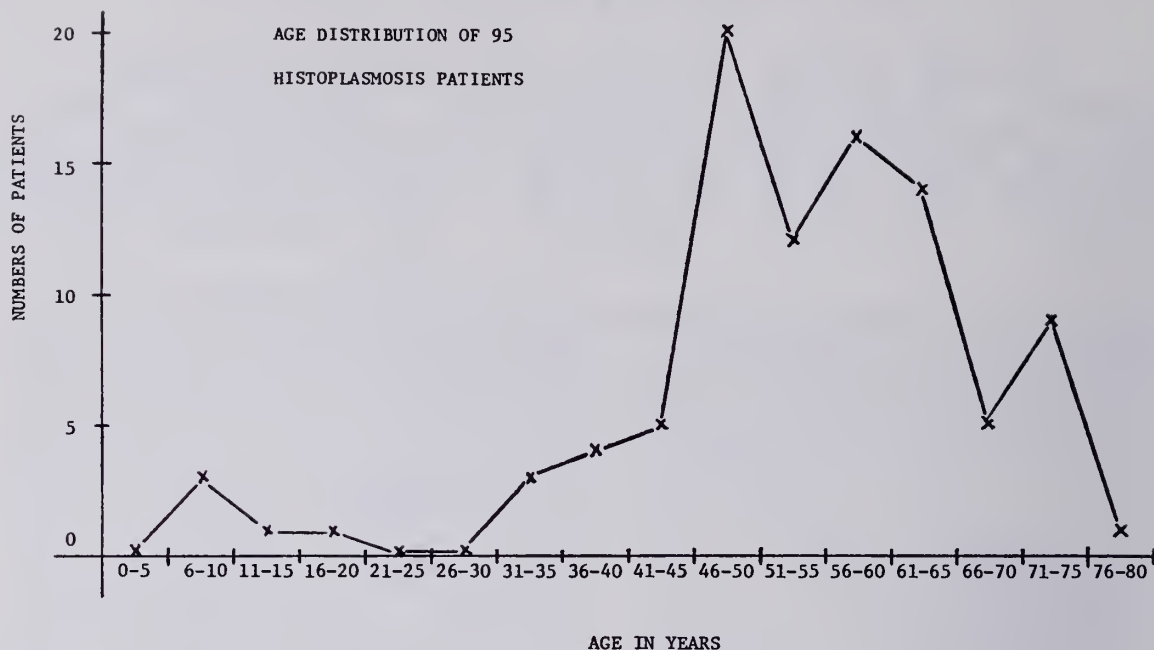
Eighteen patients were diagnosed as having infection or colonization by *Aspergillus* species. Seventeen of these had repeated positive cultures with heavy growth; 11 had positive serology. The one remaining patient was diagnosed on the basis

†From the Clinical Mycology Unit, State Mycology Center, Paris

Received at KMA: 8-16-76

Revised: 3-8-77

FIGURE 1



of a positive serology and clinical impressions. Six of these patients received at least 2.5 gms of Amphotericin B; six received less than 1.0 gms (ranging from 200 mgs to 945 mgs) Amphotericin; five received no specific antifungal therapy; one patient was treated surgically (thoracoplasty for exteriorization of cavity and removal of fungus balls).

The age range was from 24 to 84 years with an average of 56.2 years. Figure 3 shows the age distribution with 66% between the ages of 46 and 65 years.

Eighty-nine percent of the cases occurred in males with 84% being white. Table 2 lists the occupation of these patients, who again live in a predominantly rural setting.

Table 1

Occupation of cases of histoplasmosis seen in the clinical Mycology Unit, 1973-1975.

| | |
|--------------|----|
| Laborer | 25 |
| Farmer | 21 |
| Housewife | 14 |
| Merchant | 9 |
| Carpenter | 9 |
| Truck Driver | 6 |
| Miner | 4 |
| Student | 4 |
| Other | 3 |

Blastomycosis

Five patients were diagnosed as blastomycosis by either positive cultures and/or positive histo-

pathology. All five received at least 2.5 gms Amphotericin B. Their ages ranged from 40 to 81 years; four cases were white males and one case was a black female. Two were farmers, one a merchant, one in construction, and one a houseworker. Their geographic distribution is shown in Figure 4.

Table 2

Occupation of cases of aspergillosis seen in the Clinical Mycology Unit, 1973-1975.

| | |
|-----------|---|
| Farmer | 4 |
| Laborer | 4 |
| Miner | 4 |
| Housewife | 2 |
| Carpenter | 1 |
| Merchant | 1 |
| Other | 2 |

Nocardiosis

Three patients were diagnosed as nocardiosis on the basis of positive cultures. All received long-term sulfa therapy. Their age range was 51 to 74 years. All were white males, a farmer, a miner, and a truck driver. Their geographic distribution is also shown in Figure 4.

Discussion

Most of these patients had a chronic stage of pulmonary fungal infection. This is to be expected since they were diagnosed with the State Respira-

Fungal Disease in Kentucky—Chick et al

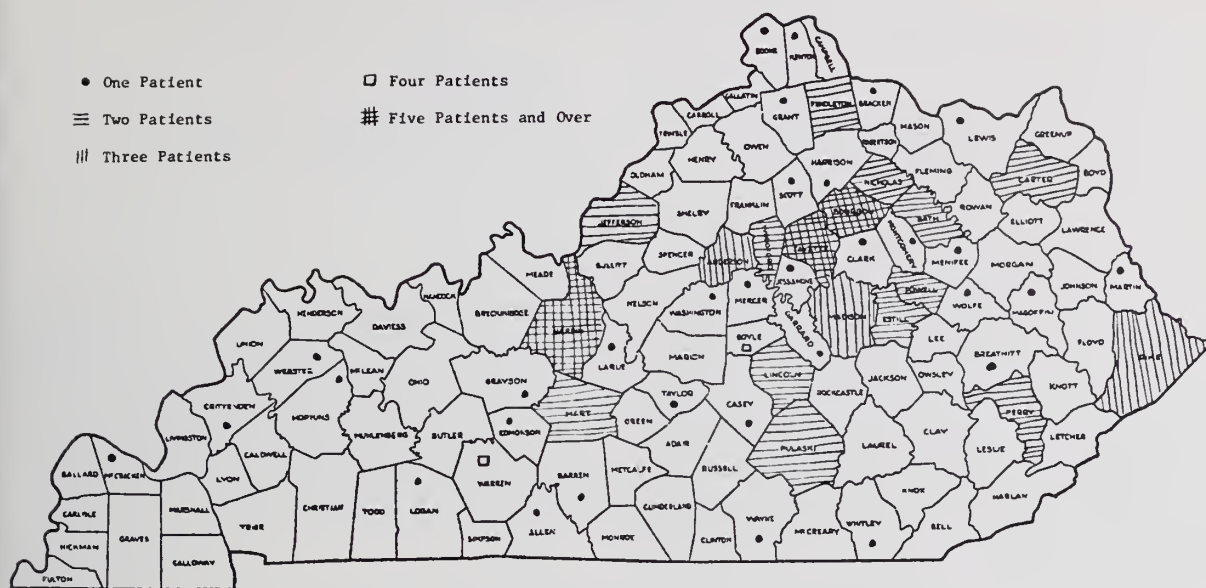


FIG. 2 County residence of Histoplasmosis patients.

tory Disease Control Program and resembled tuberculosis clinically.

Chronic pulmonary mycoses are expected in patients in their later years, i.e., over 40. Males predominate in fungal infections. This may well be a reflection of their occupations which place them in closer contact with soil which is the natural habitat of most fungi of medical importance.

The need to consider the possibility of a fungus as an etiologic agent in cases of chronic infective pulmonary disease is obvious. This is especially true in Kentucky where the two major pulmonary mycoses, histoplasmosis and blastomycosis, are endemic.

The 95 cases of histoplasmosis seen in the Clinical Mycology Unit and the concomitant 50

or more cases diagnosed and treated in other State Respiratory Disease Hospitals during this time period probably represent less than half of the expected number of cases. The number of cases of blastomycosis referred to the Unit are extremely small, considering the estimate of four cases expected per 1000 population in Kentucky.³ The cases of nocardiosis are somewhat less than anticipated. The aspergillus cases are difficult to evaluate, and there are no reasonable estimates for comparison.

Are cases being missed? Are they being treated in private offices and clinics? To date, fungal diseases have not been made officially reportable, but the Kentucky Thoracic Society has established a Voluntary Fungal Case Registry. During 1975

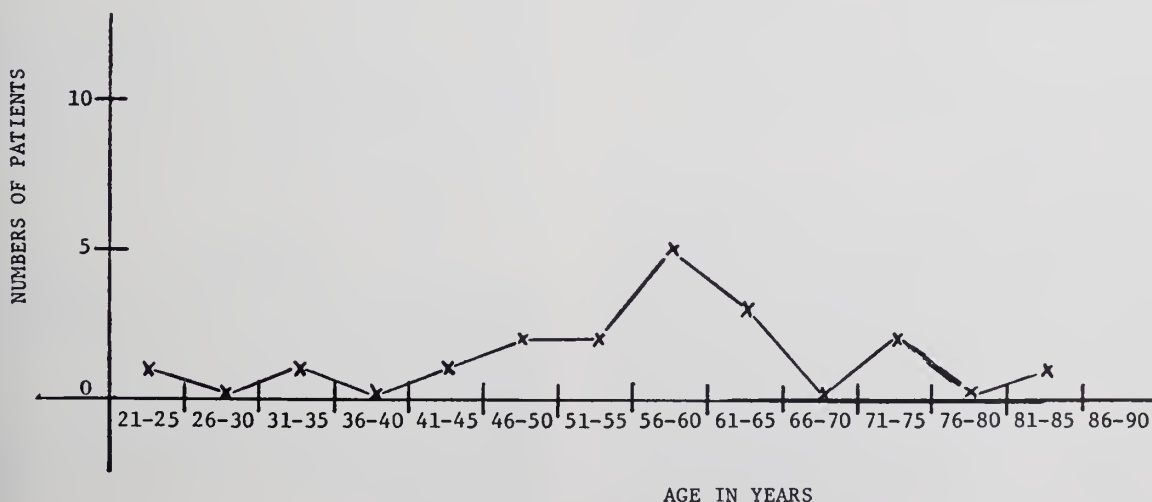


FIG. 3 Age distribution of 18 Aspergillosis patients.

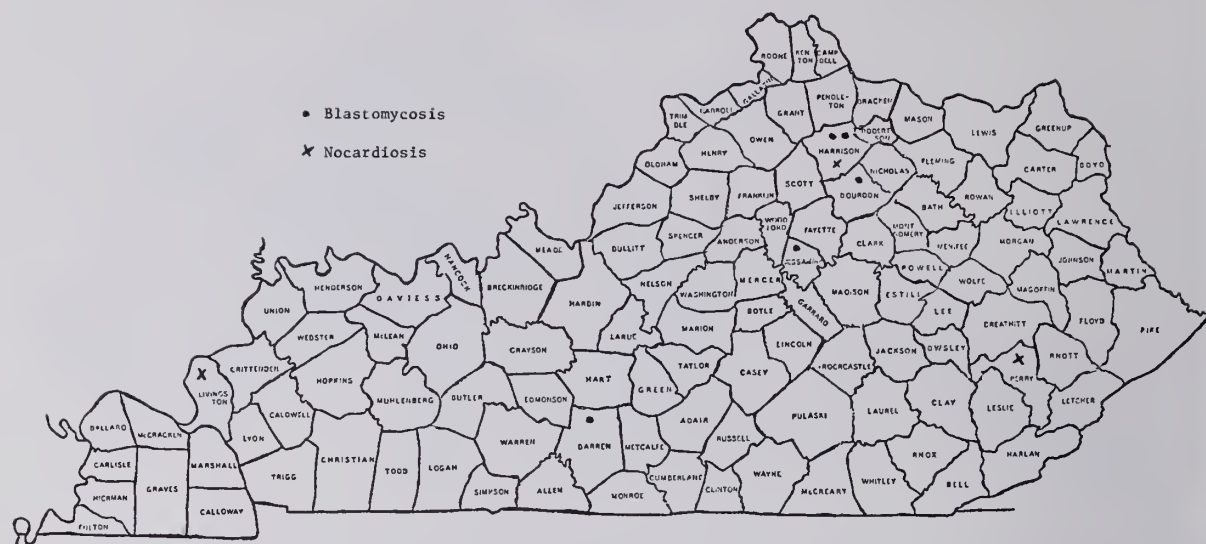


FIG. 4 Geographic distribution of Blastomycosis and Nocardiosis patients.

approximately 260 cases of fungal infection were reported, however, the great majority of these cases were reported from the Respiratory Disease Program, including old cases from previous years. Lacking an adequate overall surveillance system, it is impossible to determine the adequacy of medical care of fungal disease in Kentucky.

Lastly, one further point should be made in regard to the cases of histoplasmosis in this series. The chronic pulmonary form is expected to occur in less than five percent of persons infected with *H. capsulatum*. Approximately 45% of persons infected will have a more acute, mild or moderate disease (50% remain asymptomatic). What of these 45% acute infections? Are they being correctly diagnosed, or are they misdiagnosed as other acute pulmonary infections? Are they being adequately followed to prevent their possible progress to the chronic phase? Again the lack of a statewide surveillance or reporting system precludes any answers.

Because of the endemicity of histoplasmosis and blastomycosis in Kentucky, systemic mycotic infections should be included in the differential diagnosis of patients with undiagnosed pulmonary lesions. The complement fixation serology is an excellent screening tool; if it is positive (1:8 or greater), more aggressive procedures—as cultures, bronchoscopy, etc.—to identify the etiologic agent, are indicated. The procedure employed in Respiratory Disease clinics is as follows:

1. All new undiagnosed patients with abnormal chest x-rays, as well as diagnosed patients with a new lesion on x-ray, have blood for complement fixation titers drawn.

2. Those with a positive titer of 1:8 or greater submit a minimum of six sputum specimens for culture.

3. Patients having a pathogenic fungus isolated from culture are referred to the Clinical Mycology Unit for further evaluation and treatment.

4. In the absence of a positive culture, a patient exhibiting a high complement fixation titer, or one that appears to be steadily rising, may be referred to the Clinical Mycology Unit for more aggressive diagnostic procedures in an effort to isolate the fungus.

We feel the above steps, repeated serological titers, numerous cultures, and bronchoscopy if indicated, would greatly assist the private practitioner in diagnosing systemic mycotic infections.

References

1. Ajello, L.: Distribution of *Histoplasma capsulatum* in the United States. In Ajello, L., Chick, E. W., and Furcolow, M. L. (Eds.), *Histoplasmosis*. Charles C. Thomas, Co., Springfield, 1971, pp. 103-122.
2. Furcolow, M. L., Chick, E. W., Busey, J. F., and Menges, R.: Prevalence and Incidence Studies of Human and Canine Blastomycosis. I. Cases in the United States, 1885-1968. *Am. Rev. Resp. Dis.* 102:60 - 67, 1970.
3. Furcolow, M. L., Busey, J. F., Menges, R., and Chick, E. W.: Prevalence and Incidence Studies of Human and Canine Blastomycosis. II. Yearly Incidence Studies in Three Selected States, 1960-1967. *Am. J. Epidem.* 92:121-131, 1970.

Cutaneous Immunofluorescence in Systemic Disease†

MICHAEL W. ENGELMAN, M.D., STEVEN J. HODGE, M.D., AND
LAFAYETTE G. OWEN, M.D.

Louisville, Kentucky

Immunofluorescence of the skin now offers invaluable help in the diagnosis of the connective tissue and vesiculobullous diseases. A brief discussion of the technique is followed by a review of its application in these diseases.

THE first study utilizing fluorescein-labeled antibody to localize antigen was published in 1941. Since that time, the use of immunofluorescent (IF) techniques for localizing circulating and tissue bound antibodies has greatly enhanced our ability to accurately diagnose a variety of cutaneous and systemic diseases, and has led us closer to understanding their pathogenesis. In this paper, we wish to review briefly the cutaneous immunofluorescent studies available to the clinician and the ways in which these may prove valuable to him.

The detection of circulating antibodies is based upon their ability to react with antigens in stratified squamous epithelium. A section of squamous epithelium, frequently monkey esophagus because of its high affinity for circulating antibody, is incubated with the patient's serum and then reacted with antisera containing anti-human IgG labeled with fluorescein isothiocyanate. The resulting complexes between the anti-human IgG and antibody bound to the epithelium will fluoresce when examined under the ultraviolet microscope. This method of indirect immunofluorescence (II) allows detection of well over 11 distinct circulating antibodies, which have been called the "skin antibodies" of human sera.

Antibodies which have been fixed to human skin in vivo are detected by an immunohistologic, rather than a serologic, technique. Sections of

human skin are incubated directly with fluorescein-conjugated antisera to human immunoglobulins (G, A, M, D, E), complement components, and fibrin. Visualization of the resulting complexes is again possible under ultraviolet microscopy. Modification of this technique allows detection of other bound complement components, properdin, Factor B, etc. This method of localizing in vivo bound elements is called direct immunofluorescence (DI).

Specimens for direct immunofluorescence are best obtained using a 3 mm punch biopsy of the lesion itself, except in the vesiculobullous diseases, where the biopsy should be taken from an area adjacent to the lesion. The tissue may be kept in normal saline in a refrigerator for 24 hours before being frozen. Serum for indirect immunofluorescence may be obtained as any serum sample.

Lupus Erythematosus

One of the major breakthroughs in the field of immunofluorescence was the discovery in 1967 of in vivo basement membrane immunoglobulin deposition in cutaneous lesions of lupus erythematosus. Since that time, great strides have been made utilizing this technique as an investigative tool. Of more immediate interest, however, is the great benefit this technique brings to the clinician in his task as a diagnostician.

Direct immunofluorescence reveals positive fluorescence along the dermo-epidermal junction in skin lesions of lupus erythematosus. (Fig. 1) Similar fluorescence may be seen around the dermal appendages. This junctional fluorescence consists of granular deposits of IgG and often IgM, as well as various complement components. IgA is also found rarely. A homogenous or thready pattern instead of a granular pattern may be found occasionally. The finding of C₁, C₃, and properdin suggests that activation of both complement pathways occurs.

Deposition of Ig occurs in essentially all LE skin lesions, enabling differentiation from other

†From the Departments of Dermatology and Pathology, University of Louisville School of Medicine, Louisville



FIG. 1: Lupus Erythematosus. Linear granular deposits (band) at dermo-epidermal junction. Negative fluorescence of epidermis (top) and non-specific autofluorescence of collagen (bottom) $\times 100$.

clinically similar disorders, including drug eruptions, polymorphic light eruption, lymphocytic infiltrate of Jessner, lichen planus, seborrheic dermatitis, pseudopelade, sarcoidosis, morphea and rosacea. DI is frequently more specific in this differentiation than routine histologic studies. IF studies may also be diagnostic in cases of bullous SLE, in which the histologic picture may be confused with bullous pemphigoid, dermatitis herpetiformis, or erythema multiforme. Drug-induced LE will only rarely have a positive DI, although more positive cases are being reported.

In discoid LE, only skin lesions will have positive DI. However, in early lesions, less than two months old, DI may be absent. Treatment with potent fluorinated topical corticosteroids may also result in a false negative test, so that treatment may need to be discontinued two to three weeks before skin biopsy, although this is not usually necessary.

In systemic LE, both involved skin lesions and

uninvolved skin may be positive. Involved skin lesions have a greater than 90% incidence of positive DI. Uninvolved, light-exposed skin usually demonstrates positive DI, regardless of the presence of cutaneous lesions in these patients. Thus, the positive DI band at the dermo-epidermal junction can help confirm the diagnosis of SLE, even in the absence of lupus skin lesions.

One of the most promising applications of DI is in determining the prognosis in cases of SLE. While Caperton found no correlation between a positive band and renal disease, both Gilliam and Burnham found a high correlation and more recent work tends to confirm this finding of a high incidence of renal disease in patients with positive IF from uninvolved, non sun-exposed skin, the so called "Lupus Band". Thus, in the workup of patients suspected of having SLE, biopsies should be taken from light-exposed skin for diagnostic purposes, and from unexposed, clinically uninvolved skin for prognostic purposes.

Indirect immunofluorescent studies show no circulating basement membrane antibodies in lupus erythematosus. Circulating antinuclear antibodies (ANA) and nDNA antibodies are found when mouse and rat liver are used as substrates in the II method. The ANA is present in almost all cases of SLE, but only a small proportion of DLE patients have ANA titers that differ from normal controls. Although highly sensitive, the ANA test is not entirely specific for LE, being found also in all the connective tissue diseases, polymorphic light eruption, Jessner's lymphocytic infiltration, and malignancies. Recent work suggests that the peripheral and thready patterns of ANA fluorescence are more specific for SLE. Using rat liver substrate, an ANA titer of less than 1:40 cannot be considered diagnostically elevated, while a titer greater than 1:60 is quite suggestive of active SLE. There does not appear to be any direct correlation between the ANA titer and the intensity of DI staining.⁵ Native-DNA antibody is highly specific for SLE, but is found in only 60% of active, untreated cases.

Mixed Connective Tissue Disease

Mixed connective tissue disease (MCTD), a rheumatic disease syndrome described by Sharp et al which displays clinical features of SLE, scleroderma and polymyositis, occasionally shows positive DI consisting of speckled epidermal nuclear staining. (Fig. 2) MCTD also shows a

high titer of circulating ANA, also of the speckled pattern, that persists through periods of active disease and remission. A characteristic finding is a high titer of antibody to an extractable nuclear antigen (ENA), usually in the absence of antibody to nDNA and with an elevated or normal serum complement. In the same study, only about 50% of cases of active and inactive SLE had positive antibody to ENA. (Fig. 3) In normal controls and patients with other connective tissue diseases there were few positive cases. The specificity of the antibodies to ENA in MCTD appears to differ from that in SLE, with increased sensitivity of the ENA antigen in MCTD to RNase and resistance to DNase.

Cutaneous manifestations of patients with MCTD include non-scarring and focal alopecia, pigmentary disturbances, and sclerodactyly with swollen hands. A few have persistent chronic scarring discoid LE lesions. The most common clinical features are arthritis (or arthralgia) and Raynaud phenomenon. Lymphadenopathy and serositis are also common. Since the MCTD syndrome has many features of SLE, the early differentiation of this group, with its less aggressive clinical course, absence of renal disease, and good response to steroids is important for prognostic purposes.

Table I

IMMUNOFLUORESCENCE FINDINGS IN SKIN DISEASE

| Disease | Direct (tissue) | Indirect (serum) |
|--------------------------------------|-------------------------|------------------|
| Discoid LE | *BMZ | Negative |
| Systemic LE | **BMZ | Negative |
| Cut. Vasculitis | Vessel wall | Negative |
| Pemphigus Vulgaris | IC | IC |
| Pemphigus Vegetans | IC | IC |
| Pemphigus Erythematosus | IC (± BMZ) | IC |
| Pemphigus Foliaceus | IC | IC |
| Bullous Pemphigoid | BMZ | BMZ |
| Cicatricial Pemphigoid | BMZ | ± BMZ |
| Dermatitis Herpetiformis | Dermal papillary IgA | Negative |
| Herpes Gestationis | BMZ (?) | BMZ (?) |
| Benign Chronic Derm. of Childhood | Negative (?) | Negative (?) |

IC = Intercellular space immunofluorescence

BMZ = Basement membrane zone immunofluorescence

* = Clinically involved skin only

** = Involved and non-involved, sun-exposed skin; "Lupus band" is positive on non-involved, non-sun-exposed skin

Cutaneous Vasculitis

Because of the obvious implications of immune complex deposition in the pathogenesis of cutaneous vasculitis, IF techniques have been applied widely in the study of this clinically heterogeneous



FIG. 2: Mixed connective tissue disease syndrome. Speckled epidermal nuclear staining (direct) $\times 100$.

group of diseases. Deposition of IgG, IgM, and complement in and around blood vessels has been found in several vasculitides, including hypersensitivity angiitis, mixed cryoglobulinemia and lupus erythematosus. Immunoglobulin deposition has also been found in polyarteritis nodosa and temporal arteritis. One study involving 13 patients with Henoch-Schonlein purpura found fine granular deposits of IgA, C₃, and C₅ in the blood vessels in all patients. Another study showed immunoglobulin and complement deposition in 15 of 26 patients with necrotizing vasculitis, four patients with livido vasculitis, and three patients with facial granuloma. As would be expected, biopsy specimens must be taken from the earliest lesions in order to demonstrate immune complex deposition.

Vesiculobullous Diseases

Pemphigus

Immunofluorescent studies in all forms of pemphigus reveal both circulating and in vivo bound antibodies directed against the intercellular areas of stratified squamous epithelium. (Fig.

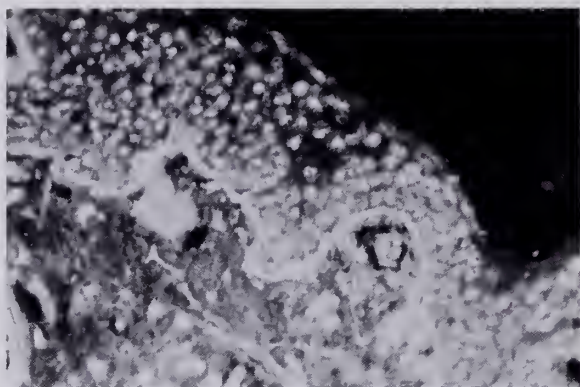


FIG. 3: Patient with SLE and features of MCTDS. Positive "band" dermo-epidermal junction with speckled epidermal nuclear staining. (direct) $\times 100$.

4 and 5) Indirect immunofluorescence using patient's sera shows a positive intercellular fluorescence in 70% of active cases of pemphigus and, if tested repeatedly over the course of disease activity, it will be positive in essentially all cases of pemphigus. It is of interest that the site of immunofluorescence is also the site of the primary histopathologic lesion, the intraepidermal bulla.

Pemphigus antibody may occur as early as one year prior to the onset of clinical disease, however titers early in the course of disease, or when in clinical remission, may be low and difficult to detect. The titer of serum antibody may be related to the degree of disease activity, thus making serial determinations useful in determining prognosis and therapeutic response. It has been suggested that a titer of 1:40 or more is consistent with the diagnosis of pemphigus even in atypical cases, while titers below this level require confirmation by direct immunofluorescence, especially in atypical clinical presentations. Titers should be determined frequently, as often as every two to three weeks, until remission occurs, then followed every one to six months. A rise in titer of two dilutions is quite suggestive of imminent clinical relapse.

Direct immunofluorescence of skin and mucous membrane lesions, as well as adjacent normal skin, shows antibody deposition in the intercellular spaces of the epidermis in 90% of cases of pemphigus. The immunoglobulin deposition is primarily IgG of all four subclasses, although occasionally IgA and IgM can be found. Components of the complement system, including C₃, C₁q, C₄, C3PA, Factor B, and Properdin, have all been found by DI.

For diagnostic purposes, the earliest bullous lesion with a portion of adjacent normal skin

should be biopsied and, on mucous membranes, the periphery of a fresh eroded lesion. Since II is frequently negative when only oral mucous membrane lesions are present, Tzanck smears on such oral erosive lesions may show positive fluorescence and be diagnostic. A biopsy for DI is indicated not only in cases where II is negative, but also in all atypical bullous diseases, especially when acantholysis is present histologically.

Bullous Pemphigoid

Immunofluorescent studies in bullous pemphigoid reveal both circulating and in vivo bound antibodies directed against the basement membrane zone of stratified epithelium, findings which are highly specific for this disease. Indirect immunofluorescence shows a linear or tubular fluorescent band along the basement membrane zone in 70-80% of cases of bullous pemphigoid. As in pemphigus, the fluorescent band corresponds to the primary histopathological lesion; that is, a subepidermal separation.

Direct immunofluorescence of involved and adjacent uninvolved skin shows a linear basement

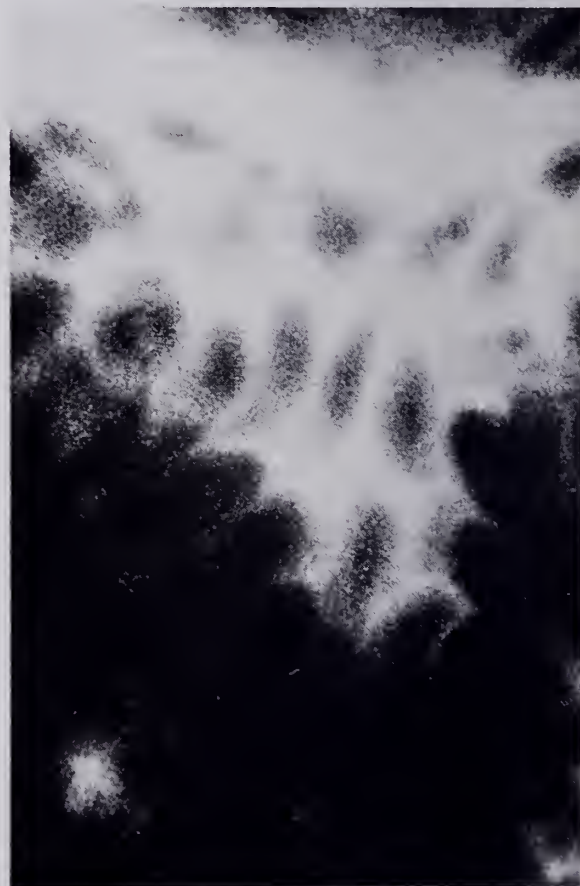


FIG. 4: Pemphigus vulgaris. Fluorescence of intercellular spaces of epidermis (direct) $\times 100$.

membrane deposition in 90% of cases of bullous pemphigoid. The pattern of fluorescence is identical in both II and DI, however DI is frequently positive when II is negative. Thus, biopsy of a skin lesion will frequently be diagnostic for bullous pemphigoid even when II is not. The band is smooth and linear and tends to be darker in the center, giving it a tubular appearance. This is in contrast to the granular band seen in lupus erythematosus and dermatitis herpetiformis. Antibody deposition consists mostly of IgG, with an occasional finding of IgA and IgM. Components of both complement pathways are frequently bound *in vivo*, suggesting that both pathways of complement are activated in this disease. Although pemphigoid antibody does fix complement, the serum complement levels are normal.

The differentiation of bullous pemphigoid, dermatitis herpetiformis, and erythema multiforme is frequently quite difficult on clinical or histologic grounds, especially since all may show subepidermal bullae. The immunofluorescent findings in BP may therefore be quite helpful in making this distinction.

Dermatitis Herpetiformis

Dermatitis herpetiformis is another subepidermal bullous disease with characteristic *in vivo* bound deposits at the dermo-epidermal junction but without the circulating antibodies against epithelium found in bullous pemphigoid. Indirect immunofluorescence is negative for antibodies directed against epithelial components, however a number of other circulating antibodies have been found including antireticulum antibodies, thyroid antibodies, and gastric antibodies.

Direct immunofluorescence of uninvolved skin adjacent to vesicles shows IgA deposition at the dermo-epidermal junction in most cases of dermatitis herpetiformis. These deposits are present in the upper dermis and tips of the dermal papillae usually with a granular appearance, although occasionally a fibrillar or homogeneous pattern occurs. Rarely, a continuous linear band along the basement membrane will occur identical to IgG deposits in bullous pemphigoid.

Since DI of the vesicle itself is frequently negative, biopsies should be taken from normal appearing skin adjacent to vesicles. Multiple sections and biopsies may be required in order to get a positive DI. As previously noted, IF studies in this disease are most helpful when clinical and his-

tological differentiation from pemphigoid is uncertain.

Herpes Gestationis

Herpes gestationis is a rare vesicular dermatosis of pregnancy. There have been several conflicting reports on the IF findings in this disease. It has been negative in some studies, however several have found IgG bound to the basement membrane, indicating the presence of circulating antibodies, and others have found a heat labile humoral factor capable of precipitating C₃ on normal skin basement membrane. Most reports in the American literature have emphasized the presence of C₃, C₅ and properdin without Ig in the basement membrane on DI.

Childhood Bullous Diseases

The presence in childhood of pemphigus vulgaris, pemphigus foliaceus, bullous pemphigoid, and dermatitis herpetiformis has been confirmed by IF studies, with findings corresponding to those seen in adults. Benign chronic bullous dermatosis of childhood, described in preschool infants, has been thought to show negative DI



FIG. 5: Bullous pemphigoid. Positive linear basement membrane immunofluorescence x 100.

and II. Chorzelski recently suggested that repetition of the IF studies in patients with negative DI and II would demonstrate immune deposits corresponding to dermatitis herpetiformis in all cases and he strongly doubted the existence of immunologically negative benign chronic bullous dermatosis of childhood.

Mixed Bullous Diseases

There have been a number of cases reported in which the clinical and histopathological features of bullous pemphigoid, dermatitis herpetiformis, and pemphigus have been combined. These so-called "transitional forms" of bullous disease frequently have IF findings compatible with more than one disease. Occasionally, a patient may present with the clinical findings of one disease and the IF findings of another.

Honeyman, et al reported a patient with typical dermatitis herpetiformis on presentation which evolved into typical bullous pemphigoid. This change was accompanied by a concomitant change in IF findings. Chorzelski, et al presented three patients with clinical, histopathologic, and

IF evidence suggesting concurrent pemphigus and pemphigoid. Circulating intercellular and basement membrane zone antibodies and intercellular and basement membrane zone in vivo deposits of IgG and complement were noted in all three patients.

The occurrence of these mixed or transitional forms of bullous disease is quite rare. It must be emphasized that although these cases are interesting particularly from a pathogenetic point of view, they do not detract from the diagnostic utility of IF studies in the vast majority of vesiculobullous diseases.

Erythema Multiforme

While not classically considered one of the vesiculobullous diseases, erythema multiforme does have a bullous component and IF studies have been carried out. No epithelial intercellular or basement membrane zone fluorescence has been found in the majority of cases studied.

Complete Bibliography upon request.

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Highlights of the Second Annual Breast Cancer Symposium

VERSION OF CONDUCT MOORE, M.D.*

TWELVE national authorities on breast cancer gathered in Louisville recently to present the latest information on the diagnosis and treatment of breast cancer, sponsored by the Cancer Center of the University of Louisville. The two-day symposium was heavily attended by Kentucky physicians, students, house staff, and nurses.

One highlight of the meeting addressed the risks and benefits of mammographic screening for breast cancer. John Bailer, M.D., Editor of the *Journal of the National Cancer Institute*, stated that periodic screening with mammography can, without doubt, reduce the mortality of women with breast cancer over the age of 50. However, he said, it is a radiation hazard, based on data of the carcinogenicity of radiation on breast tissue: three animal studies, the atomic bomb studies on Hiroshima and Nagasaki, chest fluoroscopy studies on women with tuberculosis and post-mastitis x-ray treatment results. He concluded that there is no completely safe lower limit of dosage; and the risk rises in a straight line with increasing dosage.

Doctor Bailer extrapolates from these data that six new breast cancers will be caused in every 1,000,000 women for each screening per year per rad of dosage used in mammography from the sixth year after exposure on throughout life. Estimating the benefit of mammography in lives saved at 20% reduction of mortality, he concluded the risk of mammography at 2 rads exposure to the breast tissue would equal the benefits of regular mammography for women, aged 55. Doctor Bailer aims to call serious attention to this risk and encouraged a realistic risk-benefit analysis of the results of random mass screening for breast cancer by mammography.

Myron Moskowitz, M.D., Director of the Breast Screening Project in Cincinnati, presented an opposing analysis; he estimates the x-ray risk of cancer at one-half of Doctor Bailer's, stating that the risk of cancer in women screened for five years increases only from 8% to 8.3%. He favors an aggressive screening program in which

13 biopsies are recommended for every cancer found. In his project he stated that 47% of the cancers were turned up by mammography alone, 19% by physical examination alone, and that half of the former and a fourth of the latter were "minimal" cancers susceptible of 95% survival rate. His group of screenees showed an interim cancer rate (cancers developing between screenings, found by conventional medical care) to be 7% of the total, so that screening is more than 90% efficient. This relatively small interim cancer rate does not consist of rapidly-growing cancers, as assumed by other observers.

Because of continually improving techniques, Doctor Moskowitz estimates the benefit-risk ratio of mammographic screening at 23/1 for older aged women and 5/1 in the 35-44 year group. He ascribes the difference in estimates between his figures and Doctor Bailer's to the difference in assumption about improvement in mammographic techniques and detection rates that has occurred within the last ten years, and also to the aggressive approach at his screening project, which admittedly results in a high rate of so-called unnecessary biopsies. He concludes that in the future we must select high-risk women for screening and use the screening modalities of mammography and physical examination to guide surgeons to biopsy.

A second highlight of the meeting were the opposing views of Doctors Crile and Haagensen regarding surgical management of breast cancer. Doctor Crile asserted that the death rate from breast cancer has not changed in 50 years, that partial mastectomy with or without axillary dissection or total (simple) mastectomy, can yield equal results, so that patients should have that choice. In somewhat more advanced local and regional situations, he favors modified radical mastectomy, often with plastic reconstruction of the breasts, but deplores the classical radical mastectomy as a severely-deforming procedure. He feels that earlier diagnosis, particularly by breast self-examination and mammography, would be better accepted by women if they were assured that deforming surgery would never be done. He retracted his former assertions that preservation of axillary nodes helps immune resist-

*Director, Cancer Center, University of Louisville School of Medicine, Louisville

ance against cancer; randomized trials do not support this. Doctor Crile decried adjuvant chemotherapy at this time, saying studies are too preliminary to prove beneficial.

Doctor Haagensen, on the other hand, claimed that the incidence of breast cancer has increased in our population over the last 40 years, perhaps doubled, so that real improvement in treatment must have occurred to yield the same mortality rates mentioned by Doctor Crile. He emphasized the need for thorough clinical records and for at least a ten-year follow-up of all patients. He presented his results from a careful study of 1,000 patients (two operative deaths) treated by classical radical mastectomy, using meticulous, non-deforming technique. He achieved a 70% ten-year survival rate in 152 women when one to three nodes of the axilla were involved by metastatic cancer. He concluded that an axillary dissection must do some good for patients.

Doctor Haagensen selects patients very carefully in the early stages for the classical radical mastectomy and agrees with Doctor Crile that patients with apical node involvement should never have radical surgery. He presented figures to show that radical surgery is far superior to most other alternatives, published by stage and by ten-year survival: Peters uses local excision in Stage I, which yields 44% ten-year survivals compared to Doctor Haagensen's 78%; radiation only fails to sterilize the breast of cancer cells in most cases and yields similarly poor comparisons; simple mastectomy alone by stage and by survival yields 40% to Haagensen's 68%; McWhirter's method yields 54% versus Haagensen's 76%; Handley's modified radical yields 58% compared to Haagensen's 68%.

Doctor Haagensen pleaded for physicians not to abandon the classical operation until other methods have actually proved to be better, which, despite assertions, he claims has not been shown. Doctor Haagensen also emphasized that a diagnosis on biopsy of adenosis, papillomatosis, and lobular carcinoma in situ serve to identify women at a very high risk of developing breast cancer. He stated that gross cysts also occur in women with some increase in risk of cancer, and that cysts should always be aspirated and not operated upon.

John Durant, M.D., Director of the Cancer Center at the University of Alabama, outlined a study being performed by surgeons in Alabama,

initiated because overall breast cancer results are still poor and laboratory studies have shown that a combination of surgery and chemotherapy is better than either one alone. Randomizing their positive node patients to two-drug regimens (CMF and L-Pam), 93 patients have so far been entered by 90 practicing physicians. In an average 20-month follow-up, there was no difference in the drug regimens, no difference in the pre- and post-menopausal patients, and no difference between modified radical and radical mastectomy (which procedures are selected by surgeon's choice rather than by protocol). Fifteen hundred office visits have been made to local physicians for chemotherapy, with minimal toxicity and only 3% mistakes in protocol adherence. Doctor Durant's message was that practicing physicians can and must participate in such studies with their own patients for maximum benefit to both the profession in his state and to the patients themselves. In treating definite established metastases, Doctor Durant summarized recent chemotherapy studies to show that the addition of adriamycin to the combination of cytoxan and 5-FU is superior to all other combinations at all sites, except possibly the liver and lung, and probably there also. He emphasized the importance of estrogen receptor studies for hormonal management for recurrent disease and complimented Doctor Wittliff's endocrine cancer laboratory at the University of Louisville, where these studies are done.

Charles McKhann, M.D., outlined the types of immunotherapy being tried for breast cancer these days, stating that prophylactic immunization with an agent such as a carcinogenic virus is still a dream, that active non-specific immunologic stimulation with agents such as BCG and C-parvum have yet to show real benefit; active specific immunization with tumor cells or cell components and adoptive transfer of immune factors (that is, borrowing someone else's successful response with transfer factor or immune RNA) have yet to show benefit in increased survival. He deplored premature publication of results in these areas, which he states has done harm. The importance of the immune system has definitely been demonstrated, however, by several studies showing a positive correlation of the degree of advancement of tumor with the degree of impairment of general and specific immune response. He mentioned also that T-cells and B-

cells are definitely reduced in the peripheral blood in patients treated by radiotherapy for long periods up to ten years. He concludes that a good immune response may help the cancer patient; but the present methods to produce this are not very good.

Robert Egan, M.D., often considered the father of mammography, estimated that a half million women are walking around in the United States today with detectable breast cancer. Early detection is still our best hope of improving survival rates, and mammography, while not the final answer, is the best method to secure this. It should never replace breast self-examination or physical examination, but be added to them. In his institution, 80% of the cancers being found today are Stage 0 or Stage I. Doctor Egan feels that technicians can do physical examination of the breasts as well or better than physicians. He presented his own figures, showing that of 351 biopsies generated by mammography alone, 127 cancers resulted; and of these, 98% had negative axillary lymph nodes. He emphasized that most cancers occur in multiple sites in the breast. Discussing mammography-radiation risks, he stated that if the risk of a woman's developing cancer in her lifetime is 7%, one mammogram increases it to 7.07%. He emphasized the effort to identify high-risk women; at present, 90% of cancers can be concentrated into 12% of the population with our current knowledge.

John Spratt, M.D., American Cancer Society Professor of Clinical Oncology at the University of Louisville, presented studies of breast cancer growth rates, based on serial x-rays of untreated pulmonary metastases from breast cancer or non-biopsied serial mammograms. Growth rates for individual cancers vary tremendously, some undergoing 43 doublings in 200 days and some taking 23 years to achieve this, with an average doubling time of 60 days and a range of doubling from 5-500 days. The average time from the first detection of a pulmonary metastasis to death is

300 days, according to his calculations. However, a few patients may live 8-10 years. If growth rates of a tumor are constant, Doctor Spratt estimates that the average length of existence of a breast cancer is a little more than ten years. He found no correlation between fast or slow rates and particular histologic characteristics of different cancers.

William Donegan, M.D., American Cancer Society Professor of Clinical Oncology at the University of Wisconsin at Milwaukee, brought out interesting facts supported by clinical studies regarding the surgeon's management of breast cancer. He emphasized that breast cancer is a multifocal disease in at least half of the patients; axillary nodes are positive in 40% of patients when one cannot feel any enlargement; breast lymphatics go deep through the pectoral muscle into the mediastinum and the chest and this explains pleural effusions and mediastinal recurrences on the same side as the cancer. He stated that prognosis can be related to tumor size only in the early stages. He felt that breast cancer is so complex a disease that the division of cases prognostically into four classes by numbers of axillary nodes involved is an oversimplification. He speculated that chemotherapy might be most effective as an adjunct in node-negative cases because of the very minimal, if any, tumor burden in these instances. Treating internal mammary nodes has not proved to increase survival in several studies. He also verified the statement by others that preservation of the axillary nodes does not help the patient defeat her disease.

Editors Note:

We are grateful and indebted to Doctor Moore for his valuable version of the Breast Cancer Symposium. It will benefit those who were unable to attend and supplement the information gathered by those in attendance. Doctor Moore did not review all of the papers presented and we have not published all that he reviewed.

Since receiving Doctor Moore's "version paper," most interesting additional information has appeared (Greenberg, D.S., X-ray Mammography: Silent Treatment for a Troublesome Report. N Engl J Med 296: 1015-16, 28 April 77) dealing with this controversy.



GRAND ROUNDS



University of Louisville School of Medicine

This Journal feature will be presented alternately by the University of Louisville and the University of Kentucky Departments of Medicine and Departments of Surgery. We hope to have these features revolve around subjects of immediate practical interests to the practicing physician; and, for those of us not able to attend grand rounds in the teaching centers as often as we might, we hope this will represent a bit of a refresher course.

Alkaline Reflux Gastritis*

For many years the postgastrectomy syndrome has included many conditions occurring after a variety of gastric surgical procedures. As the physiologic alterations associated with these procedures have been studied and understood, a number of specific entities have been identified. One of the symptom complexes that has been effectively singled out is alkaline reflux gastritis. This was first described as a separate entity by duPleissis in 1962.⁹

The clinical presentation of alkaline reflux gastritis is characterized by epigastric pain often made worse by eating, anorexia with weight loss, bilious vomiting, and anemia due to occult blood loss.^{1,3,8} There is usually a history of a previous gastric or duodenal operation. The symptoms may begin as early as one month or as late as 25 years postoperatively.^{1,2}

The true incidence of the syndrome is unknown.⁴ Approximately 1-3% of patients who undergo a gastric procedure require reoperation for bilious vomiting.² Yet, only three of fourteen patients with bilious vomiting reported by Reber had alkaline reflux gastritis.⁷ The syndrome obviously must be distinguished from other postgastrectomy conditions such as stomal obstruction, afferent or efferent loop obstruction, recurrent ulcer and psychiatric disorders.^{1,2,6,7} For example, Griffiths reviewed 91 patients who underwent reoperation for bilious vomiting over a 14-year period. At operation 29 of his patients had no discernible abnormality, 52 had an obstructed loop or stoma, 12 had recurrent ulcer and only 6 (6.5%) had gastritis.²

The diagnosis may be suspected on the basis of a good history. The most significant feature of the

complaints is a more or less **constant** epigastric discomfort not relieved by antacids and frequently associated with the vomiting of bile not related to a meal. However, the history should be supported with other diagnostic procedures. The most helpful, of course, is endoscopy which should show inflamed, friable, edematous mucosa with superficial erosions. The process should involve the entire gastric pouch and not just the peristomal region which is almost always inflamed.^{3,4} Berardi, et al, have emphasized that the characteristic endoscopic appearance may be present in asymptomatic patients, a sentiment echoed by others.^{4,10} Bile reflux and even esophagitis are often observed endoscopically.⁴ Biopsies should be taken. Reflux is seen with barium meal in 85% of symptomatic patients and thus provides confirmatory evidence.² When a gastric analysis is carried out, symptomatic patients are found to be achlorhydric. In the Mayo Clinic series, 16 of 38 patients were found to have histamine fast achlorhydria; while 22 of 38 had an acid response to betazole hydrochloride (Histalog®).⁶

An interesting sidelight to alkaline reflux gastritis is its possible relationship to gastric ulcer and gastric cancer both of which are also predominantly found in patients with achlorhydria. Griffiths found the highest concentrations of conjugate bile in the stomachs of post-gastrectomy patients while gastric ulcer patients had the second highest concentration.² He also reported that five of the eight patients with gastritis had type A blood which is the most frequent type seen in patients with gastric ulcer and malignancy. Bushkin has noted that four cases of gastric carcinoma have occurred in the gastric remnants of patients with long standing gastritis.³ The possible etiologic role of alkaline reflux in the development of gas-

*From the Department of Surgery, University of Kentucky College of Medicine, Lexington

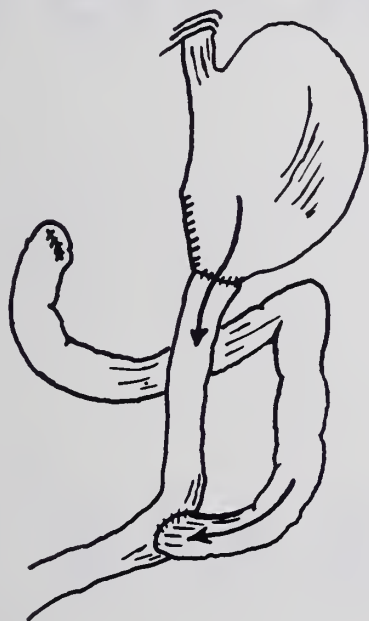
tric ulcer and cancer is certainly not proven, but is interesting.

The pathophysiology of the syndrome of alkaline reflux gastritis is controversial. The consensus at this time seems to be that there is reflux of duodenal contents into the stomach.^{1,3-6} This reflux may cause a breakdown of the gastric mucosal barrier which allows an increased back diffusion of hydrogen ions thus leading to mucosal damage.^{1,3,6} Delaney has shown experimentally that duodenal content causes worse damage than either bile or pancreatic juice alone in the dog.⁵ Yet, others have been able to reproduce the symptoms by instilling bile alone into the stomach of susceptible individuals.⁴ Gastrin may play a role in the syndrome. Gastrin is thought to have a trophic effect on the gastric mucosa, i.e., helps maintain the mucosal barrier.³ Therefore, procedures which decrease gastrin production would adversely affect the mucosal barrier. In Billroth II anastomoses gastrin has been shown to decrease by 50-75% whereas it is near normal following Billroth I anastomoses and pyloroplasty.⁴ Alkaline reflux gastritis is also more common in patients with Billroth II reconstructions.^{3,4,7,8}

While the mechanism is in doubt, there is general agreement about the pathology of alkaline

reflux gastritis. Grossly, there may be superficial gastritis with inflammation, atrophic mucosal changes, or epithelial proliferation.^{1,3,4} Microscopically, there is inflammation with round cell infiltration, a corkscrew configuration of the gastric tubules and mucosal hypertrophy with metaplasia and intestinalization.^{4,5,10} The correlation of this histologic appearance with symptoms is not totally reliable.^{4,10}

The treatment of this syndrome is not completely satisfactory at this time and the selection of patients is crucial. Some patients with much bile reflux have no symptoms while others with minimal reflux may complain bitterly. Psychological factors are always present in these patients and may be the major disability. The non-operative management of patients with excessive alkaline reflux has not been evaluated. Two approaches are available: binding of bile salts or improvement in gastric emptying. Cholestyramine binds bile salts and is utilized in treating the diarrhea caused by bile excess on the colon. Therefore, it is postulated that binding the bile salts in alkaline reflux gastritis may lead to an amelioration of the symptoms.^{3,4} It has been partially successful; it is certain that the use of cholestyramine has no value in predicting success of surgical re-



ROUX-EN-Y



TANNER 19

FIG. 1 A B-I gastroduodenostomy can be conveniently converted to a standard Roux-en-Y. The B-II gastrojejunostomy may be converted to a Tanner-19 by dividing the afferent loop and creating two jejunojejunostomies.

operations. Metoclopramide, still an experimental drug in this country, clearly increases gastric motility and enhances emptying.⁸ Its role in this syndrome is undefined at present.

As might be expected many surgical approaches have been tried. None have shown uniform success. Conversion of gastrojejunostomy to gastroduodenostomy, interposition of iso- or antiperistaltic bowel segments, further gastric resection and miscellaneous other procedures have not been successful as long-term procedures. Two procedures which are most effective in diverting bile and pancreatic juice from the stomach appear to be the best surgical method. These are the Roux-en-Y gastrojejunostomy and the Tanner modification of the Roux-en-Y, better known as the Tanner-19. (Fig. 1). A review of 68 cases of alkaline reflux gastritis treated with either of these procedures collected from five different centers had an 81% satisfactory response.^{1,6-8}

BRACK A. BIVINS, M.D.

WARD O. GRIFFIN, JR., M.D.

References

1. Pyrtle, L. J. and Bartus, S. A.: Reflux Bile Gastritis. *Am. J. Surg.* 125:408-412, 1973.
2. Griffiths, J. M. T., Smith, A. N., Small, W. P., and Falconer, C. W. A.: The Results of Reoperation for Bile Vomiting Following Surgery for Peptic Ulcer. *Br. J. Surg.* 61:838-843, 1974.
3. Bushkin, F. L., Wickbom, G., DeFord, J. W., and Woodward, E. R.: Postoperative Alkaline Reflux Gastritis. *Surg. Gynecol. & Obstet.* 138:933-939, 1974.
4. Bushkin, F. L., DeFord, J. W., Wickbom, G., and Woodward, E. R.: A Clinical Evaluation of Postoperative Alkaline Reflux Gastritis. *Am. Surgeon* 41:88-93, 1975.
5. Delaney, J. P., Broadie, T. A., and Robbins, P. L.: Pyloric Reflux Gastritis: The Offending Agent. *Surgery* 77: 764-772, 1975.
6. van Heerden, J. A., Phillips, S. F., Adson, M. A., and McIlrath, D. C.: Postoperative Reflux Gastritis. *Am. J. Surg.* 129:82-88, 1975.
7. Reber, H. A. and Way, L. W.: Surgical Treatment of Late Post-Gastrectomy Syndromes. *Am. J. Surg.* 129:71-77, 1975.
8. Davidson, E. D. and Hersh, T.: Bile Reflux gastritis: The Contribution of Inadequate Gastric Emptying. *Am. J. Surg.* 130:514-518, 1975.
9. Braasch, J. W. and Brooke-Cowden, G. L.: Disability After Gastric Surgery. *Surg. Clin. N. Am.* 56:607-613, 1976.
10. Berardi, R. S., Siroospour, D., Ruiz, R., Carnes, W., Devaiah, K. A., Peterson, C., Becknell, W. E., and Olivencia, J.: Alkaline Reflux Gastritis: A Study in Forty Postoperative Duodenal Ulcer Patients. *Am. J. Surg.* 132:552-557, 1976.

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EDITORIAL

Thoughts on the KMA Journal – The Value of Our Voice

"The power to study correctly what has been written I consider to be an important part of the art of medicine."

Hippocrates (460?-377? B.C.)
Epidemics, III. XVI.

"The amount of writings of a profession is a measure of its vitality and activity, whilst their quality is a rough indication of its intellectual state. Medical literature—... is the currency or medium of exchange by which a man contributes or borrows from the common stock of knowledge and experience, and the volume of this currency and the character of its metal are of the greatest importance to us all."

Sir Robert Hutchison (1871-1968) Lancet 2: 1059, 1939

"Doctors undertake a doctor's work; carpenters handle carpenter's tools; but, skilled or unskilled, we scribble poetry, all alike."

Horace (65-8 B.C.)
Epistles 1. i. 114

"Become familiar not only with teaching but also with writing."

Theodor Billroth (1829-1894)
(Quoted by James Kerrick in "Memories of 80 years.")

"In my journal, anyone can make a fool of himself."

Rudolf Virchow (1821-1902)

"All that goes on in medicine is to be the chief matter of interest to you. Hence you must be busy readers; and, as habits form, you will learn to look to medical journals with avidity, and new publications will be examined with keen relish."

Jacob M. DaCosta (1833-1900)
Valedictory address, Jefferson Medical College, 1874

"It is astonishing with how little reading a doctor can practice medicine, but it is not astonishing how badly he may do it."

Sir William Osler (1849-1919)
Aequanimitas

As a boy, I was constrained to investigate the many virtues of the violin, and, while very little of the effort invested by all concerned has borne any solid musical fruit, some of the philosophical lessons derived remain with me yet. In particular, I remember one classical piece that I had memorized (I thought) faithfully, and with some pride I was able to reproduce it for my long-suffering teacher at one session with very few major mistakes. I still remember the outcome: the kind lady took pains to point out to me that I had omitted the grace notes throughout. When I suggested that the grace notes were unimportant, she made it quite clear that the music was, quite simply, not complete unless all the notes were present, and this specifically included the grace notes.

Perhaps in this era of instant communications, with TV tape machines in every medical library offering more basic medical information than many of us obtained in some of our medical school classes, the importance of reading and writing may seem to be diminishing. Verbal and visual communications are indeed important, but there is no substitute for the mental discipline of sorting out one's observations and thoughts, and reducing them clearly to writing. There is no substitute either for the presence of an appropriate forum such as this Journal, as a vehicle through which we may communicate with our professional brothers.

Once each year, at budget time, steely-eyed accountants look skeptically at *The Journal's* expenses. *The Journal* now requires the use, each year, of approximately \$10 of each member's dues. As a "grace note", if you will, but even more importantly as a basic part of our Association, let us keep in mind the value of this Journal to us all.

WIHj

IN MEMORIAM

PATRICK R. O'CONNOR, M.D.
Louisville
1937-1977

Patrick Regan O'Connor, M.D., died on April 23 at the age of 40. A 1962 graduate of Vanderbilt University School of Medicine, Doctor O'Connor was Associate Professor of Ophthalmology at the University of Louisville and was Director of the Retina and Vitreous Service, Kentucky Lions Eye Research Institute. A noted author and lecturer, Doctor O'Connor belonged to the Jefferson County Medical Society, and the Kentucky and American medical associations.

TYRE GUY FORSEE, M.D.
Bardstown
1914-1977

Tyre Guy Forsee, M.D., died on April 26 in Bardstown at the age of 63. A general practitioner, Doctor Forsee graduated from the University of Louisville School of Medicine in 1941. He served as President of the Nelson County Medical Society, of which he was a member at his death. He also belonged to the Kentucky Medical Association.

GEORGE C. McCLAIN, M.D.
Benton
1919-1977

George Clay McClain, M.D., 58, died on April 26 in Benton. A general practitioner in Marshall County for 36 years, Doctor McClain was a 1941 graduate of the University of Tennessee. A Fellow of the American Academy of Family Physicians, Doctor McClain was named 1975 Citizen of the Year by the Marshall County Chamber of Commerce. He belonged to the Marshall County Medical Society, as well as the Kentucky and American medical associations.

LIVINGSTON A. WAHLE, M.D.
Wood, Wisconsin
1913-1977

Livingston Augustus Wahle, M.D., 63, died on May 3 in Wisconsin. Doctor Wahle, a 1937 graduate of the University of Louisville School of Medicine, had practiced general medicine in Somerset and Shelbyville until 1970. He had belonged to the Shelby County, Pulaski County societies, and the Kentucky and American medical associations.

FREDERICK C. EHRLMAN, M.D.
Louisville
1914-1977

Frederick Charles Ehrman, M.D., died at the age of 63 in Louisville on May 17. A 1941 graduate of the University of Louisville School of Medicine, Doctor Ehrman had served as President of the Kentucky Psychiatric Association. He belonged to the Jefferson County Medical Society, and the Kentucky and American medical associations.

BRIEF SUMMARY OF PRESCRIBING INFORMATION

ANTIMINTH® (pyrantel pamoate) **ORAL SUSPENSION**

Actions. Antiminth (pyrantel pamoate) has demonstrated anthelmintic activity against *Enterobius vermicularis* (pinworm) and *Ascaris lumbricoides* (roundworm). The anthelmintic action is probably due to the neuromuscular blocking property of the drug.

Antiminth is partially absorbed after an oral dose. Plasma levels of unchanged drug are low. Peak levels (0.05-0.13 µg/ml) are reached in 1-3 hours. Quantities greater than 50% of administered drug are excreted in feces as the unchanged form, whereas only 7% or less of the dose is found in urine as the unchanged form of the drug and its metabolites.

Indications. For the treatment of ascariasis (roundworm infection) and enterobiasis (pinworm infection).

Warnings. *Usage in Pregnancy:* Reproduction studies have been performed in animals and there was no evidence of propensity for harm to the fetus. The relevance to the human is not known.

There is no experience in pregnant women who have received this drug.

The drug has not been extensively studied in children under two years; therefore, in the treatment of children under the age of two years, the relative benefit/risk should be considered.

Precautions: Minor transient elevations of SGOT have occurred in a small percentage of patients. Therefore, this drug should be used with caution in patients with preexisting liver dysfunction.

Adverse Reactions. The most frequently encountered adverse reactions are related to the gastrointestinal system.

Gastrointestinal and hepatic reactions: anorexia, nausea, vomiting, gastralgia, abdominal cramps, diarrhea and tenesmus, transient elevation of SGOT.

CNS reactions: headache, dizziness, drowsiness, and insomnia. Skin reactions: rashes.

Dosage and Administration. *Children and Adults:* Antiminth Oral Suspension (50 mg of pyrantel base/ml) should be administered in a single dose of 11 mg of pyrantel base per kg of body weight (or 5 mg/lb.); maximum total dose 1 gram. This corresponds to a simplified dosage regimen of 1 ml of Antiminth per 10 lb. of body weight. (One teaspoonful=5 ml.)

Antiminth (pyrantel pamoate) Oral Suspension may be administered without regard to ingestion of food or time of day, and purging is not necessary prior to, during, or after therapy. It may be taken with milk or fruit juices.

How Supplied. Antiminth Oral Suspension is available as a pleasant tasting caramel-flavored suspension which contains the equivalent of 50 mg pyrantel base per ml, supplied in 60 ml bottles and Unitcups™ of 5 ml in packages of 12.

More detailed professional information available on request.

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Antiminth[®]
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equivalent to 50 mg pyrantel/ml
ORAL SUSPENSION



a drug of choice in
pinworm infections

please see brief summary of prescribing information on facing page.

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RECENT CHANGES

federal register

**Providing
Drug Information
to Physicians**

**Informational
Bulletin #433-76**

**National
Health
Insurance**

**special report
Malpractice
insurance:**

**drug
bulletin**

**Health care doesn't
need more red tape**

**Drug firms challenge
MAC rules**

**Drug
Substitution**

**The Common Denominator
of Health Progress
RESEARCH**

Mailgram 2

THERE ARE A LOT OF PEOPLE GETTING BETWEEN YOU AND YOUR PATIENT.

Medicine today is in the spotlight, subjected to all sorts of scrutiny. Your control over patient therapy is being monitored, judged and occasionally abrogated, sometimes by unknown third parties.

The worry is that in the wake of this focus, the relationship between you and your patient will be weakened, without offsetting benefits. Consider three examples:

Drug substitution In most states, pharmacy laws, regulations or professional custom stipulate that your generic prescriptions be filled with the precise product you prescribe. But in the last five years, a dozen or more State laws have been changed, permitting the pharmacist in most cases to select a product of the same generic drug to fill any prescription.

Ironically, this dilution of physician control has taken place against a background of growing evidence that purportedly equivalent drug products may be inequivalent, since neither present drug standards nor their enforcement are optimal. In fact, the FDA itself says it has not enforced the same standards for hundreds of "follow-on" products that it had applied to the original drug approvals. Thus physician control over patient therapy is being eroded with a risk that patients may be exposed to drugs of uncertain quality.

The major advertised claim for substitution is reduced prescription prices for consumers. Yet no documentation of any significant savings has been produced.

MAC Maximum Allowable Cost, MAC for short, is a federal regulation designed to cut the Government's bill by setting price ceilings for drugs dispensed to Medicare and Medicaid patients. Unless the prescriber writes on the prescription that a particular product is medically necessary, the Government intends to pay only the cost of the lowest-priced, purportedly-equivalent,

generally-available product. The effect of the program may be that elderly and indigent patients will be restricted to products which someone in Washington believes are priced right. Practicing doctors will have little to say about administration of the program, since Government will have absolute authority to make its choices stick.

The drug lag The future of drug and device research depends upon a scientific and regulatory environment that encourages therapeutic innovations. The American pharmaceutical industry annually is spending more than \$1 billion of its own funds and evaluating more than 1,200 investigational compounds in clinical research. Disease targets include cancer, atherosclerosis, viruses and central nervous system disorders, among others. But there is a major barrier to the flow of new drugs to your patients: The cost of the research is more than ten times what it was, per product, in 1962; and whereas governmental clearance of new drug applications took six months then, it commonly consumes two years now.

The FDA needs adequate time, of course, to consider data. But it is equally clear that the present approval process contributes to needless delay of needed therapy. That's why the increased efficiency of the drug approval process is vital to all our futures.

If these issues concern you, we suggest that you make your voice heard—among your colleagues and your representatives in State legislatures and in Washington.

It could make a difference in your practice tomorrow.



Pharmaceutical Manufacturers Association
1155 Fifteenth Street, N.W., Washington, D.C. 20005

All oral bronchodilators are pretty much the same. Right? Wrong!

The difference is in their action—both before and after symptoms begin. That's the reason for TEDRAL®.

- effective and prolonged bronchodilation from the synergistic effect of ephedrine and theophylline
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For proven performance...

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Each tablet contains 130 mg theophylline, 24 mg ephedrine hydrochloride, and 8 mg phenobarbital

Each tablet contains 180 mg anhydrous theophylline (90 mg in the immediate release layer and 90 mg in the sustained release layer); 48 mg ephedrine hydrochloride (16 mg in the immediate release layer and 32 mg in the sustained release layer); and 25 mg phenobarbital in the immediate release layer

Each 5 ml teaspoonful contains 32.5 mg theophylline, 6 mg ephedrine HCl, and 2 mg phenobarbital; the alcohol content is 15%.

See next page for brief summary.

SUSTAINED ACTION



WARNER/CHILCOTT
Division, Warner-Lambert Company
Morris Plains, New Jersey 07950

T-C

TEDRAL®

TEDRAL® SA Sustained Action

TEDRAL® Elixir

CAUTION: Federal law prohibits dispensing Tedral SA without prescription.

Description. Tedral: each tablet contains 130 mg theophylline, 24 mg ephedrine hydrochloride, and 8 mg phenobarbital.

Tedral SA: each tablet contains 180 mg anhydrous theophylline (90 mg in the immediate release layer and 90 mg in the sustained release layer); 48 mg ephedrine hydrochloride (16 mg in the immediate release layer and 32 mg in the sustained release layer); 25 mg phenobarbital in the immediate release layer.

Tedral Elixir: each 5 ml teaspoonful contains 32.5 mg theophylline, 6 mg ephedrine hydrochloride, and 2 mg phenobarbital; the alcohol content is 15%.

Indications. Tedral, Tedral SA, and Tedral Elixir are indicated for the symptomatic relief of bronchial asthma, asthmatic bronchitis, and other bronchospastic disorders. They may also be used prophylactically to abort or minimize asthmatic attacks and are of value in managing occasional, seasonal or perennial asthma.

Tedral SA (Sustained Action) offers the convenience of b.i.d. dosage.

Tedral Elixir is convenient for persons who may have difficulty in swallowing tablets.

These Tedral formulations are adjuncts in the total management of the asthmatic patient. Acute or severe asthmatic attacks may necessitate supplemental therapy with other drugs by inhalation or other parenteral routes.

Contraindications. Sensitivity to any of the ingredients; porphyria.

Warnings. Drowsiness may occur. PHENOBARBITAL MAY BE HABIT-FORMING.

Precautions. Use with caution in the presence of cardiovascular disease, severe hypertension, hyperthyroidism, prostatic hypertrophy, or glaucoma.

Adverse Reactions. Mild epigastric distress, palpitation, tremulousness, insomnia, difficulty of micturition, and CNS stimulation have been reported.

Average Dosage. *Prophylactic or Therapeutic.*

Tedral: *Adults*—One or two tablets every 4 hours. *Children*—(Over 60 lb) one-half the adult dose.

Tedral SA: *Adults*—One tablet on arising and one tablet 12 hours later. Tablets should not be chewed. *Children*—Not established for children under 12.

Tedral Elixir: *Note:* One teaspoonful is equivalent to one-quarter Tedral tablet. *Children*—One teaspoonful per 30 lb body weight, every 4-6 hours, unless prescribed otherwise by physician. Should be given to children under 2 years of age only with extreme caution. *Adults*—One to two tablespoonfuls every four hours.

Supplied. Tedral: White, uncoated scored tablets in bottles of 24 (N 0047-0230-24), 100 (N 0047-0230-51) and 1000 (N 0047-0230-60). Also in Unit Dose—package of 10 x 10 strips (N 0047-0230-11).

Tedral SA: Double-layered, uncoated, coral/mottled white tablets in bottles of 100 (N 0047-0231-51) and 1000 (N 0047-0231-60). Also in Unit Dose—package of 10 x 10 strips (N 0047-0231-11).

Tedral Elixir: Dark red and cherry-flavored in 474 ml (16 fl oz) bottles (N 0047-0242-16).

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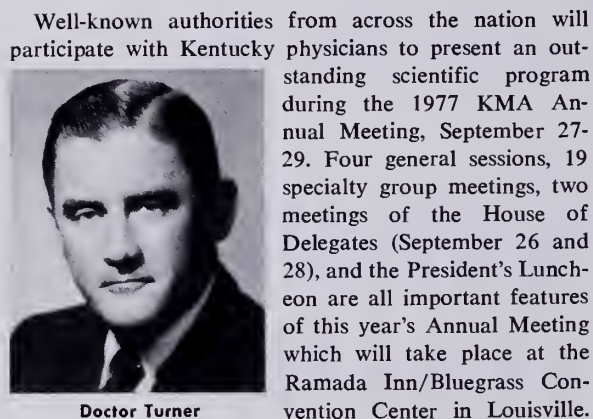
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ASSOCIATIONAL NEWS



1977 KMA Annual Meeting, September 27-29 in Louisville To Feature Outstanding Scientific Program, Speakers



Doctor Turner

Well-known authorities from across the nation will participate with Kentucky physicians to present an outstanding scientific program during the 1977 KMA Annual Meeting, September 27-29. Four general sessions, 19 specialty group meetings, two meetings of the House of Delegates (September 26 and 28), and the President's Luncheon are all important features of this year's Annual Meeting which will take place at the Ramada Inn/Bluegrass Convention Center in Louisville.

Scientific presentations for this year's general sessions will deal with "Cardiovascular Problems," "Cancer," and "Alcoholism." Speaking on the September 28 morning session will be Roderick H. Turner, M.D., Boston; Ralph Straffon, M.D., Cleveland; and Sanford I. Roth, M.D., Little Rock.

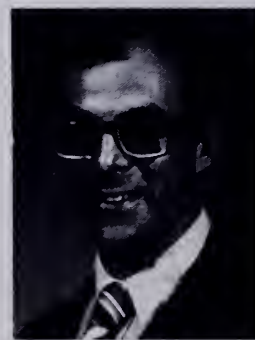
Doctor Turner, a 1958 graduate of the Indiana University School of Medicine, is Assistant Clinical Professor of Orthopedic Surgery at Tufts University School of Medicine. Speaking on "Indications for Total Hip and Total Knee Replacement," Doctor Turner serves on the Executive Committee of the Department of Orthopedic Surgery at the New England Baptist Hospital. He belongs to the American Rheumatism Association and the American Academy of Orthopaedic Surgeons.

Chairman of the Department of Urology at the Cleveland Clinic Foundation, Doctor Straffon will deal with "Renal Autotransplantation and Bench Surgery." He currently serves as President of the American Board of Urology and is Secretary of the American Association of Genito-Urinary Surgeons. Doctor Straffon is a member of the Council on Urology of the National Kidney Foundation and serves on the Executive Committee of the Societe Internationale D'Urologie. He is also the Urology Representative for the AMA Interspecialty Advisory Board.

Speaking on "Hypercalcemia and Hyperparathyroidism," Doctor Roth is Professor and Chairman of the Department of Pathology at the University of Arkansas for Medical Sciences. A 1956 graduate of Harvard Medical School, he is a pathologist at the Arkansas Children's Hospital in Little Rock. A member of the American Association of Pathologists and Bacteriologists and the International Academy of Pathology, Doctor Roth has



Doctor Straffon



Doctor Roth

authored over '75 articles and abstracts.

In addition to the highlights previously mentioned, the meeting will also feature the Annual Convention of the Auxiliary to KMA, the annual KEMPAC Seminar, more than 80 scientific and technical exhibits, and alumni reunions of the University of Louisville School of Medicine. A number of miscellaneous meetings will be announced at a later date.

This year's scientific program has been fully accredited once more by the AMA under Category I of the Physicians Recognition Award. Further details will be published in upcoming issues of the "Communicator" and *The Journal*.

KMA Leadership Conference Set for July 14

The 1977 KMA Leadership Conference, which will be held July 14 at the Hyatt Regency Hotel in Lexington, will emphasize "The Third Century: Our Role in Medicine's Future."

Designed to draw the profession closer together and increase communications at all levels of organized medicine, the program was planned in response to a recommendation by the 1976 House of Delegates to hold a conference for county medical society presidents and other interested individuals.

The day-long session, which is open to all interested members, will feature presentations by several members and officers of the Association, as well as an AMA official. Time has been designated in the program for numerous question and answer periods.



Natural balance doesn't always come naturally

Big Balanced Rock, Chiricahua Mountains, Arizona (approx. 1,000 tons)

Widely Prescribed—Antivert is the most widely prescribed agent for the management of vertigo* associated with diseases affecting the vestibular system such as Menière's disease, labyrinthitis, and vestibular neuronitis.

Effective for Nausea and Vomiting—Antivert/25 can relieve the nausea and vomiting often associated with vertigo*.

Dosage for Vertigo*—The usual adult dosage for Antivert/25 is one tablet t.i.d.

SUMMARY OF PRESCRIBING INFORMATION

INDICATIONS. Based on a review of this drug by the National Academy of Sciences—National Research Council and/or other information, FDA has classified the indications as follows:

Effective: Management of nausea and vomiting and dizziness associated with vertigo.

Probably Effective: Management of vertigo associated with diseases affecting the vestibular system.

Classification of the less than effective indications requires further evaluation.

CONTRAINDICATIONS. Administration of Antivert (meclizine HCl) during pregnancy or to women who may become pregnant is contraindicated in view of the teratogenic effect of the drug in rats.

The administration of meclizine to pregnant rats during the 12-15 day of gestation has produced cleft palate in the offspring. Limited studies using doses of over 100 mg./kg./day in rabbits and 10 mg./kg./day in pigs and monkeys did not show cleft palate. Congeners of meclizine have caused cleft palate in species other than the rat.

Meclizine HCl is contraindicated in individuals who have shown a previous hypersensitivity to it.

WARNINGS. Since drowsiness may, on occasion, occur with use of this drug, patients should be warned of this possibility and cautioned against driving a car or operating dangerous machinery.


Usage in Children: Clinical studies establishing safety and effectiveness in children have not been done; therefore, usage is not recommended in the pediatric age group.

Usage in Pregnancy: See "Contraindications."

ADVERSE REACTIONS. Drowsiness, dry mouth and, on rare occasions, blurred vision have been reported.

More detailed professional information available on request.

ROERIG Pfizer
A division of Pfizer Pharmaceuticals
New York, New York 10017

Antivert[®]/25 
(meclizine HCl) 25 mg. Tablets
for vertigo*

DYAZIDE[®]

Trademark

Each capsule contains 50 mg. of Dyrenium[®] (triamterene, SK&F Co.) and 25 mg. of hydrochlorothiazide.

MAKES SENSE FOR LONG-TERM CONTROL OF HYPERTENSION*



Before prescribing, see complete prescribing information in SK&F Co. literature or PDR. A brief summary follows:

* WARNING

This drug is not indicated for initial therapy of edema or hypertension. Edema or hypertension requires therapy titrated to the individual. If this combination represents the dosage so determined, its use may be more convenient in patient management. Treatment of hypertension and edema is not static, but must be reevaluated as conditions in each patient warrant.

* **Indications:** When the combination represents the dosage determined by titration: Adjunctive therapy in edema associated with congestive heart failure, hepatic cirrhosis, the nephrotic syndrome. Corticosteroid and estrogen-induced edema, idiopathic edema; hypertension, when the potassium sparing action of triamterene is warranted. Routine use of diuretics in healthy pregnant women is inappropriate; they are indicated in pregnancy only when edema is due to pathological causes (see Warnings).

Contraindications: Further use in anuria, progressive renal or hepatic dysfunction, hyperkalemia. Pre-existing elevated serum potassium. Hypersensitivity to either component or other sulfonamide-derived drugs.

Warnings: Do not use potassium supplements, dietary or otherwise, unless hypokalemia develops or dietary intake of potassium is markedly impaired. If supplementary potassium is needed, potassium tablets should not be used. Hyper-

kalemia can occur, and has been associated with cardiac irregularities. It is more likely in the severely ill, with urine volume less than one liter/day, the elderly and diabetics with suspected or confirmed renal insufficiency. Periodically, serum K⁺ levels should be determined. If hyperkalemia develops, substitute a thiazide alone, restrict K⁺ intake. Associated widened QRS complex or arrhythmia requires prompt additional therapy. Thiazides cross the placental barrier and appear in cord blood. Use in pregnancy requires weighing anticipated benefits against possible hazards, including fetal or neonatal jaundice, thrombocytopenia, other adverse reactions seen in adults. Thiazides appear and triamterene may appear in breast milk. If their use is essential, the patient should stop nursing. Adequate information on use in children is not available.

Precautions: Do periodic serum electrolyte determinations (particularly important in patients vomiting excessively or receiving parenteral fluids). Periodic BUN and serum creatinine determinations should be made, especially in the elderly, diabetics or those with suspected or confirmed renal insufficiency. Watch for signs of impending coma in severe liver disease. If spironolactone is used concomitantly, determine serum K⁺ frequently; both can cause K⁺ retention and elevated serum K⁺. Two deaths have been reported with such concomitant therapy (in one, recommended dosage was exceeded, in the other serum electrolytes were not properly monitored). Observe regularly for possible blood dyscrasias, liver damage, other idiosyncratic reactions. Blood dyscrasias have been reported in patients receiving triamterene, and leukopenia,

thrombocytopenia, agranulocytosis, and anemia have been reported with this. Triamterene is a weak folic acid antagonist. Periodic blood studies in cirrhotics with megaly. Antihypertensive effect may be enhanced in post-sympathectomy patients. Use caution in surgical patients. The following may transiently elevate BUN or creatinine: hyperglycemia and glycosuria (diabetic requirements may be altered), hyperuricemia, gout, digitalis intoxication (in hypokalemia), increasing alkali reserve with possible metabolic acidosis. 'Dyazide' interferes with fluorescence measurement of quinidine.

Adverse Reactions: Muscle cramps, weakness, dizziness, headache, dry mouth; anaphylaxis, urticaria, photosensitivity, purpura; dermatological conditions; nausea and vomiting, diarrhea, constipation, other gastrointestinal disturbances. Necrotizing vasculitis, paresis, icterus, pancreatitis, xanthopsia and allergic pneumonitis have occurred with this drug alone.

Supplied: Bottles of 100 and 1000 capsules. Single Unit Packages of 100 (intended for institutional use only).

SK&F CO., Carolina, P.R. 00080
Subsidiary of SmithKline Corporation

TRIAMTERENE CONSERVES POTASSIUM WHILE HYDROCHLOROTHIAZIDE LOWERS BLOOD PRESSURE

Journal Adds Four M.D.'s To Editorial Board

Three regional editors and an Assistant Scientific Editor were recently appointed by the Board of Trustees



Doctor Grimes

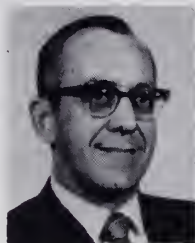
to *The Journal* editorial board. Allen E. Grimes, Jr., M.D., Lexington; William W. Hall, M.D., Owensboro; and Thomas L. Heavern, Jr., M.D., Highland Heights, were named to serve in the new capacity of regional editor. Stephen Z. Smith, M.D., Louisville, will work with the Scientific Editor, Paul C. Grider, Jr., M.D., in the review and editing

of articles submitted for publication.

The function of a regional editor as outlined by *The Journal* Editor, John S. Llewellyn, M.D., would be: "1) to review and generate contributions from members in a particular area of the state and 2) to broaden the editorial philosophy of *The Journal* to better reflect the feelings of the entire membership."



Doctor Hall



Doctor Heavern

Doctor Grimes, a surgeon, is the President-Elect of the Fayette County Medical Society and is Past President of the Medical Staff at Good Samaritan Hospital in Lexington. A past Chairman of the Board of Trustees of KMA (1969-70), Doctor Hall has previously served as Insurance Editor of *The Journal* and as a member of the Blue Shield Board of Directors. A pediatrician, Doctor Heavern was an AMA Alternate Delegate from 1972-76 and has served on numerous KMA committees.

Doctor Smith, who has recently established practice with S. Randolph Scheen, M.D., in dermatology, has served on the editorial boards of several national journals.

CME Records-Keeping To Be Voluntary and Simple

An announcement was made in April that KMA would maintain continuing medical education records for the membership, as directed by the House of Delegates last September. This is in keeping with the commitment by the Delegates to voluntary participation in CME.

There was no intention that this records-keeping process be stringent or inconvenient; rather, the purpose was to provide a service and constitute an information source for all members. The reporting form sent out was meant to be used as an example of how CME hours could be reported in summary form, but any convenient method can be used.

Members of the Kentucky Academy of Family Physicians and other physicians who participate in systematic records-keeping programs do not need to fill out a separate form for KMA. To avoid duplication, simply provide KMA a copy of the same record sent to other groups.

Plans are to request that the forms be returned to KMA in August, although several members have already submitted their records. For further information contact the KMA Headquarters Office.

Deadline for Scientific Exhibit Applications is July 1

All physicians interested in presenting a scientific exhibit at the 1977 KMA Annual Meeting are urged to make their plans soon. Richard A. Kielar, M.D., Lexington, Chairman of the KMA Scientific Exhibits Committee, notes that all applications should be turned in by July 1 to the KMA Headquarters Office.

Scientific exhibits are welcomed and supported as a facet of continuing postgraduate education. The Kentucky Academy of Family Physicians allows one credit hour for each hour of participation and presentation of scientific exhibits up to 15 hours. Up to ten hours of Category 4 credit is allowed for the AMA Physicians Recognition Award.

An application blank was printed in the April, 1977, issue of *The Journal* on page 162. Additional applications may be obtained by contacting the KMA Headquarters Office.

Swine Flu Claims Referred To U.S. Justice Dept.

Exclusive remedy for personal injury or death arising from the administration of swine flu vaccine by a program participant in the National Swine Flu Immunization Program of 1976 is to file a claim against the United States under the Federal Tort Claims Act.

The Office of the Attorney General of the Commonwealth of Kentucky, in issuing this reminder, emphasizes the fact that the federal government will defend these claims. Any program participant who has had a claim made against him should contact:

Neil R. Peterson, Esquire
U. S. Department of Justice
Civil Division, Torts Section
Safeway Building, Room 904
Washington, D.C. 20530

HEW Appoints Dr. Sloane

Harvey Sloane, M.D., Mayor of Louisville, was recently appointed to the HEW External Advisory Committee on National Health Insurance Issues. Composed of 29 public members and three HEW appointees, the Committee will be responsible for reviewing systematically the problems of financing health care services and examining the role of federal and state governments and the private insurance industry in the administration of national health insurance.

Digest of Proceedings, Board of Trustees April 6-7, 1977

The KMA Board of Trustees held its fourth meeting of the Associational year on April 6-7 at the Headquarters Office in Louisville. President Parks outlined activities in which he had been involved since the last Board session and a report was made on the implementation of the Medicare resolution passed by the House of Delegates on February 10. This implementation included the introduction of a resolution at the AMA Annual Convention in June and a meeting with Congressman Tim Lee Carter, M.D., in May on this subject along with representatives of HEW and SSA. Ongoing discussions are also being held with Metropolitan, Doctor Parks reported.

The budget for fiscal year 1977-78 was approved by the Board and it was noted that the names of those members delinquent in paying the 1975 dues assessment in July would be published in *The Journal*.

Nominations were made by the Board to forward to the Governor for physicians to serve on the Board of Medical Licensure and the Health Facilities and Health Services Certificate of Need and Licensure Board.

The Board was brought up to date on the activities of the Physicians Assistant Program at the University of Kentucky by its newly appointed Director, Hal Wilson, M.D.

The Board of Medical Licensure report called attention to the statewide hearings on CME and revealed plans to poll physicians on their feelings on this subject.



Mrs. R. Parnell Rollings, President of the Auxiliary to KMA, presents Arthur H. Keeney, M.D., Dean of the University of Louisville School of Medicine, a check in the amount of \$10,888.39 from the American Medical Association Education and Research Foundation.



D. Kay Clawson, M.D., Dean of the University of Kentucky College of Medicine, accepts a check from Mrs. Rollings in the amount of \$6,154.80. AMA-ERF funds were made available to the medical schools through the efforts of the Auxiliary to KMA.

Chairman Holloway then presented a number of reports and recommendations from the Executive Committee to include the endorsement of an AMA program on "Diagnosing and Reporting Driver Impairment—A Medical-Legal Problem" to be held September 30, following the KMA Annual Meeting. A new member recruitment and retention program was outlined for the Board and approval of the 1977 KMA Leadership Conference program to be held July 14 in Lexington was given.

The Board named William W. Hall, M.D., Owensboro; Thomas L. Heavern, Jr., M.D., Highland Heights; and Allen E. Grimes, Jr., M.D., Lexington, to serve as Regional Editors of *The Journal*. Stephen Z. Smith, M.D., Louisville, was named as Assistant Scientific Editor.

In other action, President Parks presented the duties of the newly formed Health Care Costs Council which are to (a) identify and examine the causes of increased health expenditures; and (b) review optional courses for public and KMA policy to cope with these rising costs.

Checks totaling over \$17,000 were presented by Mrs. R. Parnell Rollings, President of the Auxiliary to KMA, to the Deans of the two medical schools in Kentucky from the AMA-ERF fund. The funds were made available through the efforts of the Auxiliary members across the state.

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Administrator

Ray D. Jones
Associate



Headquarters Activity

KMA had physicians and staff members in attendance at the following activities and events:

MAY

- 16-19 Washington Dinner and Congressional Visitation, Washington, D.C.
- 24 KMA-KNA Joint Practice Committee, Louisville
- 25-26 Emergency Medical Care Seminar, Louisville
- 26 7th Trustee District Meeting, Frankfort
- Blue Cross-Blue Shield Board Meeting, Louisville

JUNE

- 2 Health Care Costs Council, Louisville
- 9 Committee on Constitution and Bylaws, Louisville
- 13 *Journal* Editors Meeting, Louisville
- 14-16 State Board Exams, Louisville
- 15 Title XIX Committee Meeting, Frankfort
- Advisory Council on Medical Assistance, Frankfort
- 18-23 AMA Annual Meeting, San Francisco
- 29 Judicial Council, Louisville



Committee Activity

KMA-KNA Joint Practice Committee April 21

The KMA-KNA Joint Practice Committee met on April 21 to review the success of the seminar, "Joint Practice: Now and In the Future," which was held on March 5. The evaluation taken at the seminar described the program as beneficial and thought-provoking. It is the Committee's intention to continue to sponsor similar seminars in the future with the possibility of hosting a Regional Joint Practice Seminar in the next couple of years.



Did you know . . .

The U.S. House of Representatives Commerce Committee has deleted a section of H.R. 3816 that would have made physician practices and professional associations subject to nearly day-to-day monitoring by the Federal Trade Commission. This represents a substantial victory for organized medicine.

As proposed, the bill would have given the FTC authority to subpoena records, levy fines up to \$5,000 a

day and assume control of any "legal entity" upon receiving any complaint, or even before a complaint was filed. All this could be done outside legal due process.

Most of the credit is due to the efforts of testimony by AMA representatives and work by the AMA Washington Office. KMA submitted written testimony to the House Committee and discussed this bill with Kentucky Congressmen.



Members in the news

NEW MEMBERS

BELL

Charles C. Moore, M.D., Middlesboro
Vinai Piratanonta, M.D., Middlesboro

BOYLE

Steven D. Lenn, M.D., Danville

CAMPBELL-KENTON

Victor R. Smith, M.D., Highland Heights

CARROLL

David S. Miller, M.D., Carrollton

CHRISTIAN

Shaffideen N. Ali, M.D., Hopkinsville

FAYETTE

David Christopherson, M.D., Lexington
Norman C. Estes, M.D., Lexington
Claude H. Farley, M.D., Lexington
William S. Foley, Jr., M.D., Lexington
Otto Kaak, M.D., Lexington
John H. Kavanaugh, M.D., Lexington
Barnett W. Lewis, M.D., Lexington
Paul S. Williamson, M.D., Nicholasville

FLOYD

Gene Moore, M.D., McDowell
Gordon Young, M.D., Prestonsburg

HENDERSON

Fred Barnett, M.D., Henderson

JEFFERSON

Madar Bux, M.D., Louisville
Robert B. Elliott, M.D., Louisville
Samuel G. Eubanks, Jr., M.D., Louisville
Manuel Grimaldi, M.D., Louisville
Mark H. Healy, M.D., Louisville
Robert A. Jacob, M.D., Louisville
John M. Johnstone, M.D., Louisville
Forrest Kuhn, M.D., Louisville
Sushil V. Kumar, M.D., Louisville
Jacob Mathew, M.D., Louisville
Frederick H. Porter, M.D., Louisville
Ramesh P. Shah, M.D., Louisville

LETCHER

Mustaq Ahmad, M.D., Whitesburg

MARSHALL

James E. Holmes, D.O., Benton

McCRACKEN

Ted Borodofsky, Jr., M.D., Paducah

METCALF

E. Gary Hogan, M.D., Edmonton

OHIO

Gloria Warner, D.O., Hartford

Milo Warner, D.O., Hartford

PERRY

Earle M. Marsh, M.D., Hazard

PIKE

J. W. Black, M.D., Pikeville

PULASKI

Melanio Medroso, M.D., Somerset

WARREN

Francis M. Fesmire, M.D., Bowling Green

HONORS

Hoyt D. Gardner, M.D., Louisville, recently received the Alumni Achievement Award from Westminster College in Fulton, Missouri. Doctor Gardner, a surgeon, is a past President of the Kentucky Medical Association and serves on the AMA Board of Trustees.

Borys Surawicz, M.D., Lexington, was elected Vice-President of the American College of Cardiology at the 26th Annual Scientific Session of the College held in March in Las Vegas.

Harold Q. Davis, M.D., Louisville, and **Albert C. Selke, Jr., M.D.**, Lexington, were named as Fellows of the American College of Radiology at a recent meeting of the group held in April in Houston.

Ky. Physicians Are Members Of ACS Committees

Several Kentucky physicians are currently serving on committees of the American College of Surgeons for 1977. Two Louisville physicians, **Condict Moore, M.D.**, and **Hiram C. Polk, Jr., M.D.**, are members of the ACS Commission on Cancer. Doctor Moore, who is also a member of the Committee on Continuing Education, is assigned to the Commission's Committee on Education. Doctor Polk is assigned to the Committee on Approvals. A senior member of the Cancer Commission is **Laman A. Gray, Sr., M.D.**, also of Louisville.

Ward O. Griffen, Jr., M.D., Lexington, serves on the Committee on Medical Motion Pictures, and **William T. Ramage, Jr., M.D.**, Louisville, is a Senior member of the Committee on Trauma.

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Don Marsh
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Western Hills Plaza
Ashland, Kentucky
(606) 324-2122

AMA Challenges in the Courts

One of the professions's major concerns today is government's mounting pressure for increasing regulation of medicine. In response to these challenges, the AMA has taken a new position of advocacy for physicians and the public which has resulted in the AMA's very first lawsuits against the government.

In March 1975, the AMA took HEW to court over its Utilization Review Regulations which required review of all Medicare and Medicaid hospitalizations within 24 hours. The AMA contended the regulations constituted unlawful interference with the rights of physicians and patients. The AMA won its case and HEW withdrew the regulations.

The AMA also initiated legal action against

HEW's Maximum Allowable Cost Rule, charging that the rule, which would govern the prescription of drugs for Medicare and Medicaid patients intrudes on clinical decisions made by physicians. The case is now pending.

The AMA has also joined with co-plaintiffs, the state of North Carolina, the state of Nebraska and the North Carolina Medical Society, in a suit against the Health Planning Act of 1974 which gives the Secretary of HEW sweeping power over nearly every aspect of health care.

These are just some of the many actions the AMA has taken to protect your rights and interests and the rights and interests of your patients. With your support, it can be even more effective.



**Join us.
We can do much more together.**

Dept. of Membership Development
American Medical Association
535 N. Dearborn St./Chicago, IL 60610

Please send me more information on the AMA
and AMA membership.

Name _____

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PUREPAC manufactures all major generic products in its own plants. The other four companies have many of their generic products made by smaller outside contract manufacturers.

The latest national study* (American Druggist magazine) reports pharmacists

prefer PUREPAC over every other pharmaceutical company with a generic line including Pfizer, Parke-Davis, SmithKline and Lederle.

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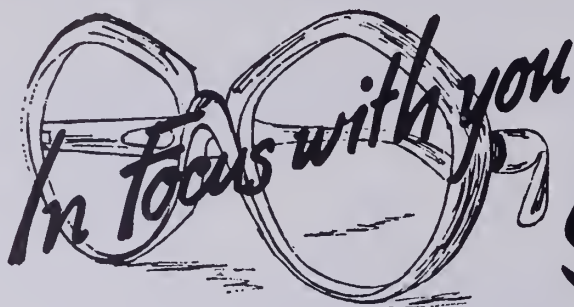
*Copies of this study and PUREPAC's annual report are available upon request.



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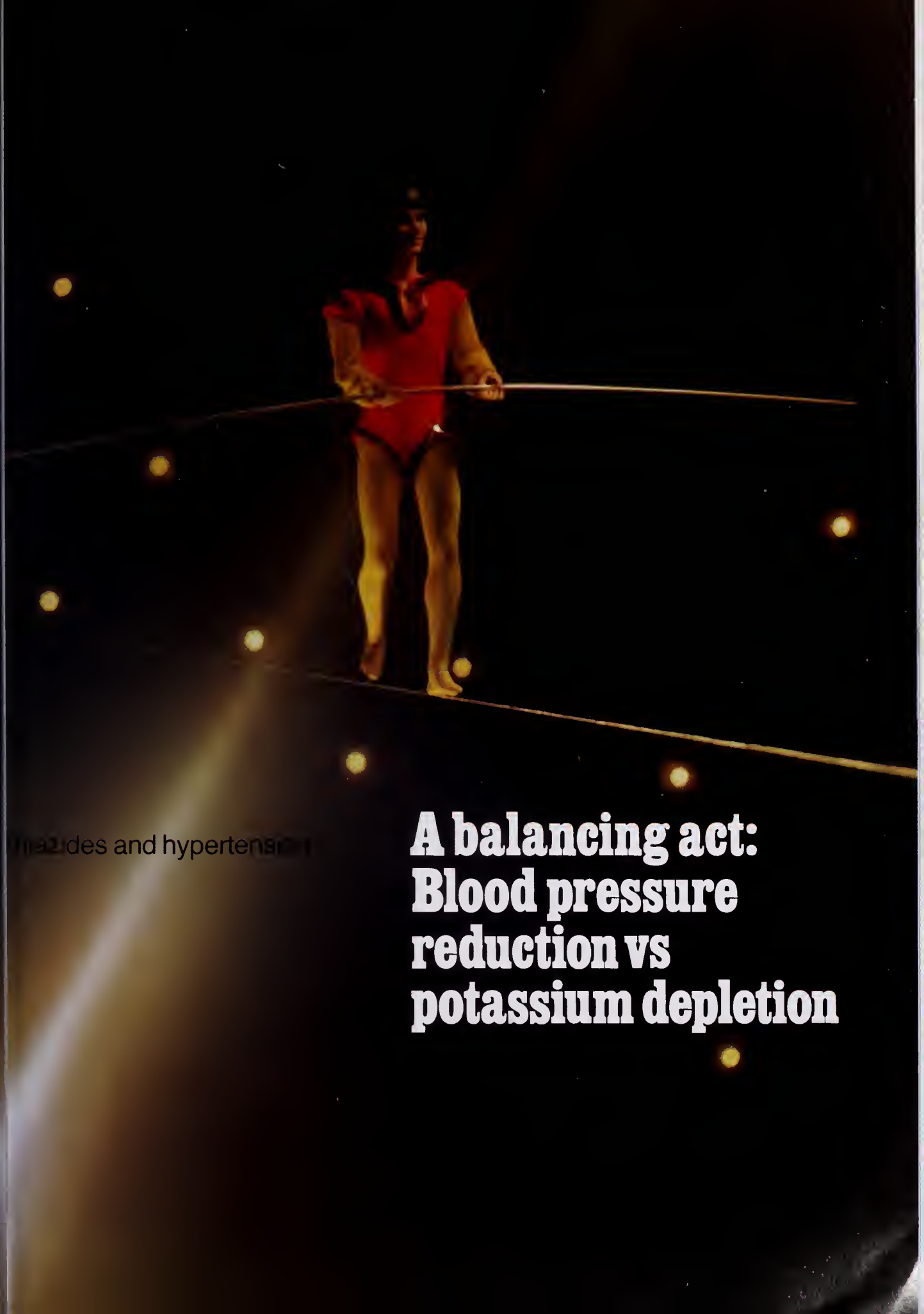
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Diuretics and hypertension

A balancing act: Blood pressure reduction vs potassium depletion

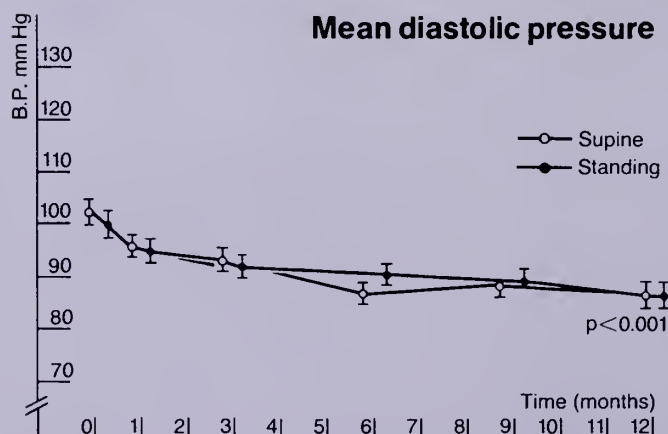
From a 1-year study of 18 patients
with mild uncomplicated
hypertension published in The Lancet*

Once a day

Naturetin[®]

Bendro-
flumethiazide
Tablets N.F.

Diastolic blood pressure down 12-15%



"The mean pretreatment blood pressure was 170/103mmHg (supine) and 166/100mmHg (standing). Diastolic pressure continued to fall over the first 6 months and then there was no further change up to 1 year...The mean blood pressure at 12 months was 153/88mmHg (supine) and 142/88mmHg (standing)."

"The patients were receiving a single daily dose of 10 mg bendrofluazide [bendroflumethiazide]...there were no apparent side effects from the medication."

*Wilkinson PR et al: The Lancet 1:759-762,1975.



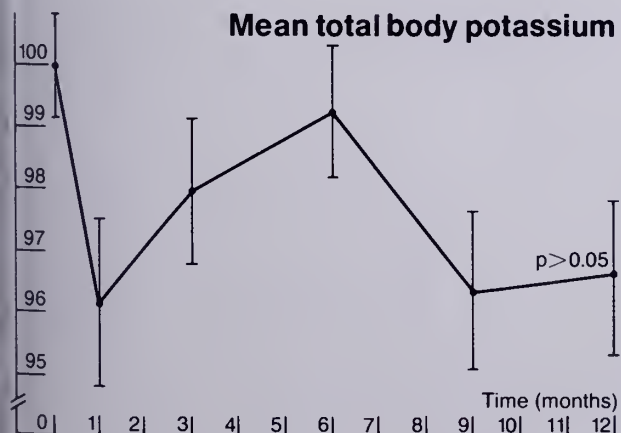
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2.5, 5 and 10 mg

Potassium stabilized at 96% mean TBK



"The amount of potassium loss during the period of study did not seem to be clinically significant."

"A serum potassium of less than 3.5mmol per litre is often taken as the value below which potassium supplements should be given...At an arbitrary lower value for serum potassium of 3.0mmol per litre, few patients, our data suggest, would need potassium supplements. Our findings with TBK support this view..."

See next page for full prescribing information.

Once a day Naturetin® Bendroflumethiazide Tablets N.F.

NATURETIN®-2.5

NATURETIN®-5

NATURETIN®-10

Bendroflumethiazide Tablets N.F.

DESCRIPTION

Naturetin (Bendroflumethiazide Tablets N.F.) is a benzothiadiazine derivative containing a benzyl and a trifluoromethyl group. It is a potent oral diuretic and antihypertensive agent available as compressed tablets providing 2.5, 5.0, or 10 mg. bendroflumethiazide.

ACTIONS

The mechanism of action results in an interference with the renal tubular mechanism of electrolyte reabsorption. At maximal therapeutic dosage all thiazides are approximately equal in their diuretic potency. The mechanism whereby thiazides function in the control of hypertension is unknown.

INDICATIONS

Naturetin (Bendroflumethiazide Tablets N.F.) is indicated as adjunctive therapy in edema associated with congestive heart failure, hepatic cirrhosis and corticosteroid and estrogen therapy.

Bendroflumethiazide has also been found useful in edema due to various forms of renal dysfunction such as: nephrotic syndrome, acute glomerulonephritis, and chronic renal failure.

Naturetin (Bendroflumethiazide Tablets N.F.) is indicated in the management of hypertension either as the sole therapeutic agent or to enhance the effectiveness of other antihypertensive drugs in the more severe forms of hypertension.

Usage in Pregnancy. The routine use of diuretics in an otherwise healthy woman is inappropriate and exposes mother and fetus to unnecessary hazard. Diuretics do not prevent development of toxemia of pregnancy, and there is no satisfactory evidence that they are useful in the treatment of developed toxemia.

Edema during pregnancy may arise from pathological causes or from the physiologic and mechanical consequences of pregnancy. Thiazides are indicated in pregnancy when edema is due to pathologic causes, just as they are in the absence of pregnancy (see WARNINGS). Dependent edema in pregnancy, resulting from restriction of venous return by the expanded uterus, is properly treated through elevation of the lower extremities and use of support hose; use of diuretics to lower intravascular volume in this case is illogical and unnecessary. There is hypervolemia during normal pregnancy which is harmful to neither the fetus nor the mother (in the absence of cardiovascular disease), but which is associated with edema, including generalized edema, in the majority of pregnant women. If this edema produces discomfort, increased recumbency will often provide relief. In rare instances, this edema may cause extreme discomfort which is not relieved by rest. In these cases, a short course of diuretics may provide relief and may be appropriate.

CONTRAINDICATIONS

Bendroflumethiazide is contraindicated in anuria.

It is also contraindicated in patients who have previously demonstrated hypersensitivity to it or other sulfonamide-derived drugs.

WARNINGS

Bendroflumethiazide should be used with caution in severe renal disease. In patients with renal disease, thiazides may precipitate azotemia. Cumulative effects of the drug may develop in patients with impaired renal function.

Thiazides should be used with caution in patients with impaired hepatic function or progressive liver disease, since minor alterations of fluid and electrolyte balance may precipitate hepatic coma.

Thiazides may be additive or may potentiate the action of other antihypertensive drugs. Potentiation occurs with ganglionic or peripheral adrenergic blocking drugs.

Sensitivity reactions may occur in patients with a history of allergy or bronchial asthma.

The possibility of exacerbation or activation of systemic lupus erythematosus has been reported.

Usage in Pregnancy. Thiazides cross the placental barrier and appear in cord blood. The use of thiazides in pregnant women requires that the anticipated benefit be weighed against possible hazards to the fetus. These hazards include fetal or neonatal jaundice, thrombocytopenia, and possibly other adverse reactions which have occurred in the adult.

Nursing Mothers. Thiazides appear in breast milk. If use of the drug is deemed essential, the patient should stop nursing.

PRECAUTIONS

Periodic determination of serum electrolytes to detect possible electrolyte imbalance should be performed at appropriate intervals.

All patients receiving thiazide therapy should be observed for clinical signs of fluid or electrolyte imbalance; namely, hyponatremia, hypochloremic alkalosis, and hypokalemia. Serum and urine electrolyte determinations are particularly important when the patient is vomiting excessively or receiving parenteral fluids. Medication such as digitalis may also influence serum electrolytes. Warning signs, irrespective of cause, are: dryness of the mouth, thirst, weakness, lethargy, drowsiness, restlessness, muscle pains or cramps, muscular fatigue, hypotension, oliguria, tachycardia, and gastrointestinal disturbances such as nausea and vomiting.

Hypokalemia may develop with thiazides as with any other potent diuretic, especially with brisk diuresis, when severe cirrhosis is present, or during concomitant use of corticosteroids or ACTH.

Interference with adequate oral electrolyte intake will also contribute to hypokalemia. Digitalis therapy may exaggerate metabolic effects of hypokalemia especially with reference to myocardial activity.

Any chloride deficit is generally mild and usually does not require specific treatment except under extraordinary circumstances (as in liver disease or renal disease). Dilutional hyponatremia may occur in edematous patients in hot weather; appropriate therapy is water restriction, rather than administration of salt except in rare instances when the hyponatremia is life threatening. In actual salt depletion, appropriate replacement is the therapy of choice.

Hyperuricemia may occur or frank gout may be precipitated in certain patients receiving thiazide therapy.

Insulin requirements in diabetic patients may be increased, decreased, or unchanged. Latent diabetes mellitus may become manifest during thiazide administration.

Thiazide drugs may increase the responsiveness to tubocurarine.

The antihypertensive effects of the drug may be enhanced in the postsympathectomy patient.

Thiazides may decrease arterial responsiveness to norepinephrine. This diminution is not sufficient to preclude effectiveness of the pressor agent for therapeutic use. If emergency surgery is indicated, preanesthetic and anesthetic agents should be administered in reduced dosage.

If progressive renal impairment becomes evident, as indicated by a rising nonprotein nitrogen or blood urea nitrogen, a careful reappraisal of therapy is necessary with consideration given to withholding or discontinuing diuretic therapy.

Thiazides may decrease serum PBI levels without signs of thyroid disturbance.

ADVERSE REACTIONS

Gastrointestinal System: anorexia, gastric irritation, nausea, vomiting, cramping, diarrhea, constipation, jaundice (intrahepatic cholestatic jaundice), and pancreatitis.

Central Nervous System: dizziness, vertigo, paresthesia, headache, and xanthopsia.

Hematologic: leukopenia, agranulocytosis, thrombocytopenia, and aplastic anemia.

Dermatologic-Hypersensitivity: purpura, photosensitivity, rash, urticaria, and necrotizing angitis (vasculitis, cutaneous vasculitis).

Cardiovascular: orthostatic hypotension may occur and may be aggravated by alcohol, barbiturates or narcotics. **Other:** hyperglycemia, glycosuria, occasional metabolic acidosis in diabetic patients, hyperuricemia, allergic glomerulonephritis, muscle spasm, weakness, and restlessness.

Whenever adverse reactions are moderate or severe, thiazide dosage should be reduced or therapy withdrawn.

DOSAGE AND ADMINISTRATION

Therapy should be individualized according to patient response. This therapy should be titrated to gain maximal therapeutic response as well as the minimal dose possible to maintain that therapeutic response.

Diuretic: The usual dose is 5 mg. once daily, preferably given in the morning. To initiate therapy, doses up to 20 mg. may be given once daily or divided into two doses. A single daily dose of 2.5 to 5 mg. should suffice for maintenance.

Alternatively, intermittent therapy may be advantageous in many patients. By administering the preparation every other day or on a three to five day per week schedule, electrolyte imbalance is less likely to occur; however, the possibility still exists.

In general, the lowest dosage that achieves the therapeutic response should be employed.

Antihypertensive: The suggested initial dosage is 5 to 20 mg. daily. Maintenance dosage may range from 2.5 to 15 mg. per day, depending on the individual response of the patient. When the diuretic is used with other antihypertensive agents, lower maintenance doses for each drug are usually sufficient.

STORAGE

Store at room temperature; avoid excessive heat.

HOW SUPPLIED

5 mg. tablets in bottles of 100, 5 mg. tablets (scored) in bottles of 100 and 1000, and 10 mg. tablets (scored) in bottles of 100.

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THE ANXIETY-SPECIFIC.

- a predictable pattern of patient response
- seldom associated with serious side effects, in proper dosage
- rarely interferes with mental acuity
- used concomitantly with many primary medications
- three dosage strengths meet most patient needs

LIBRIUM® ^{IV} chlordiazepoxide HCl/Roche 5mg, 10mg, 25mg capsules

Libritabs® (chlordiazepoxide) available
in 5 mg, 10 mg and 25 mg tablets.

When prescribing, please consult complete product information, a summary of which follows:

Indications: Relief of anxiety and tension arising alone or accompanying various disease states.

Contraindications: Patients with known hypersensitivity to the drug.

Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. As with all CNS-depressing drugs, caution patients against hazardous occupations requiring continued mental alertness (e.g., operating machinery, driving). Though physical and psychological dependence have rarely been reported on recommended doses, caution in administering to addiction-prone individuals or those who might increase dosage; withdrawal symptoms (including convulsions), following discontinuation of the drug and similar to those with barbiturates, have been reported.

Use in Pregnancy: Use of minor tranquilizers during first trimester should almost always be avoided because of increased risk of congenital malformations as suggested by several studies. Consider possibility of pregnancy when instituting therapy; advise patients to discuss pregnancy if they intend to or do become pregnant.

Precautions: In the elderly and debilitated, and in children over six, limit to smallest effective dosage (initially 10 mg or less per day) to preclude ataxia or oversedation, increasing gradually as needed and tolerated. Not recommended in children under six, though generally not recommended, if in combination therapy with other psycho-

tropics seems indicated, carefully consider individual pharmacologic effects, particularly in use of potentiating drugs such as MAO inhibitors and phenothiazines. Observe usual precautions in presence of impaired renal or hepatic function. Paradoxical reactions (e.g., excitement, stimulation and acute rage) have been reported in psychiatric patients and hyperactive aggressive children. Employ usual precautions in treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation have been reported very rarely in patients receiving the drug and oral anticoagulants; causal relation-

ship has not been established clinically.

Adverse Reactions: Drowsiness, ataxia and confusion may occur, especially in the elderly and debilitated. These are reversible in most instances by proper dosage adjustment, but are also occasionally observed at the lower dosage ranges. In a few instances syncope has been reported. Also encountered are isolated instances of skin eruptions, edema, minor menstrual irregularities, nausea and constipation, extrapyramidal symptoms, increased and decreased libido—all infrequent and generally controlled with dosage reduction; changes in EEG patterns (low-voltage fast activity) may appear during and after treatment; blood dyscrasias (including agranulocytosis), jaundice and hepatic dysfunction have been reported occasionally, making periodic blood counts and liver function tests advisable during protracted therapy.

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Issue Highlights Rheumatic Fever,
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Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed; drugs such as phenothiazines, narcotics, barbiturates, MAO inhibitors and other antidepressants may potentiate its action. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.

Side Effects: Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.



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MESSAGE FROM THE PRESIDENT



THERE has been so much concern by the public, the Congress, and physicians over National Health Insurance that it seems appropriate to comment on it this month. I have been asked by some of you to give the KMA position on NHI and this hopefully will be at least a partial answer for you.

The only official position KMA has taken on NHI is to support the AMA bill. As most of you will remember, the AMA Board of Trustees and House of Delegates, at the December meeting in Philadelphia, discussed fully the question of whether the AMA should have any bill introduced in the Congress supporting a National Health Insurance concept since it is generally understood that physicians individually are opposed to NHI. It was the consensus of opinion that it would be better for AMA to have a bill ready for introduction with physician ideas of how it ought to be implemented rather than try to amend some of the other bills. Our own Congressmen and others have repeatedly told us that there will be National Health Insurance of some type and that we had better offer a bill or accept one of the others being offered.

It is my feeling that if a referendum were taken of all physicians asking them if they favor National Health Insurance the response would be in the negative. However, if these same physicians were asked if National Health Insurance is to be a reality would they want to help write the bill, the answer would be in the affirmative—and such polls have been taken and the majority of those responding did answer in the affirmative.

The AMA bill asks for an insurance program for comprehensive coverage paid for through private insurance by employer and employee, and by the federal government for those unemployed and the indigent. It is called the Comprehensive Health Care Insurance Act of 1977 (H.R. 1818 and S. 218) and was introduced in Congress on January 13, 1977. You would do well to request a copy and study its provisions. Since physicians are the providers of much of the medical care of this nation, they should be informed about health legislation and should be the ones who help write it.

Paul J. Parks



POSTGRADUATE OPPORTUNITIES



IN KENTUCKY

JULY

- 14 KMA Leadership Conference, Hyatt Regency, Lexington

SEPTEMBER

- 15 John I. Perlstein Memorial Lectureship, "Sexual Differentiation—Normal and Abnormal," by Robert Blizzard, M.D., Charlottesville; Health Sciences Center Auditorium, Louisville
- 16-17 Fiberoptic Bronchoscopy Workshop, University of Kentucky Medical Center, Fee: \$200.
- 17-21 Medicine Update—1977**, Kenlake State Park
- 22-24 Second Annual Postgraduate Course in Gynecologic Surgery**, University of Louisville Health Sciences Center, Louisville
- 26-29 KMA Annual Meeting, Ramada Inn/Bluegrass Convention Center, Louisville

OCTOBER

- 2-7 Eighth Family Medicine Review (Session I)*, University of Kentucky College of Medicine, Hyatt Regency Lexington
23-28 (Session II)
- 17-21 Second Family Medicine Review**, University of Louisville School of Medicine, Marriott Inn, Clarksville
- 19-20 Third Annual Symposium—Current Trends in Allergy and Immunology**, Marriott Inn, Clarksville

NOVEMBER

- 4-5 Conference on Cancer of the Bladder and Prostate, Kentucky Division, American Cancer Society, Stouffer's Inn, Louisville. Space limited, no fee. Contact: George A. Sehlinger, M.D., 2313 Medical Arts Bldg., Louisville, Ky. 40217

IN SURROUNDING STATES

OCTOBER

- 3-4 25th Annual Tennessee Valley Medical Assembly, Chattanooga Choo Choo, Convention Hall,

Chattanooga. Contact: Woodruff A. Banks, Jr., M.D., 960 E. 3rd St., Suite 313, Chattanooga, Tenn. 37403.

- 5-6 Fourth Annual "Pitfalls in Pediatric Diagnosis and Management," Stouffer's Indianapolis Inn, Indianapolis. Contact: Jay L. Grosfeld, M.D., James Whitcomb Riley Hospital for Children, 1100 W. Michigan St., Indianapolis, Ind. 46202.

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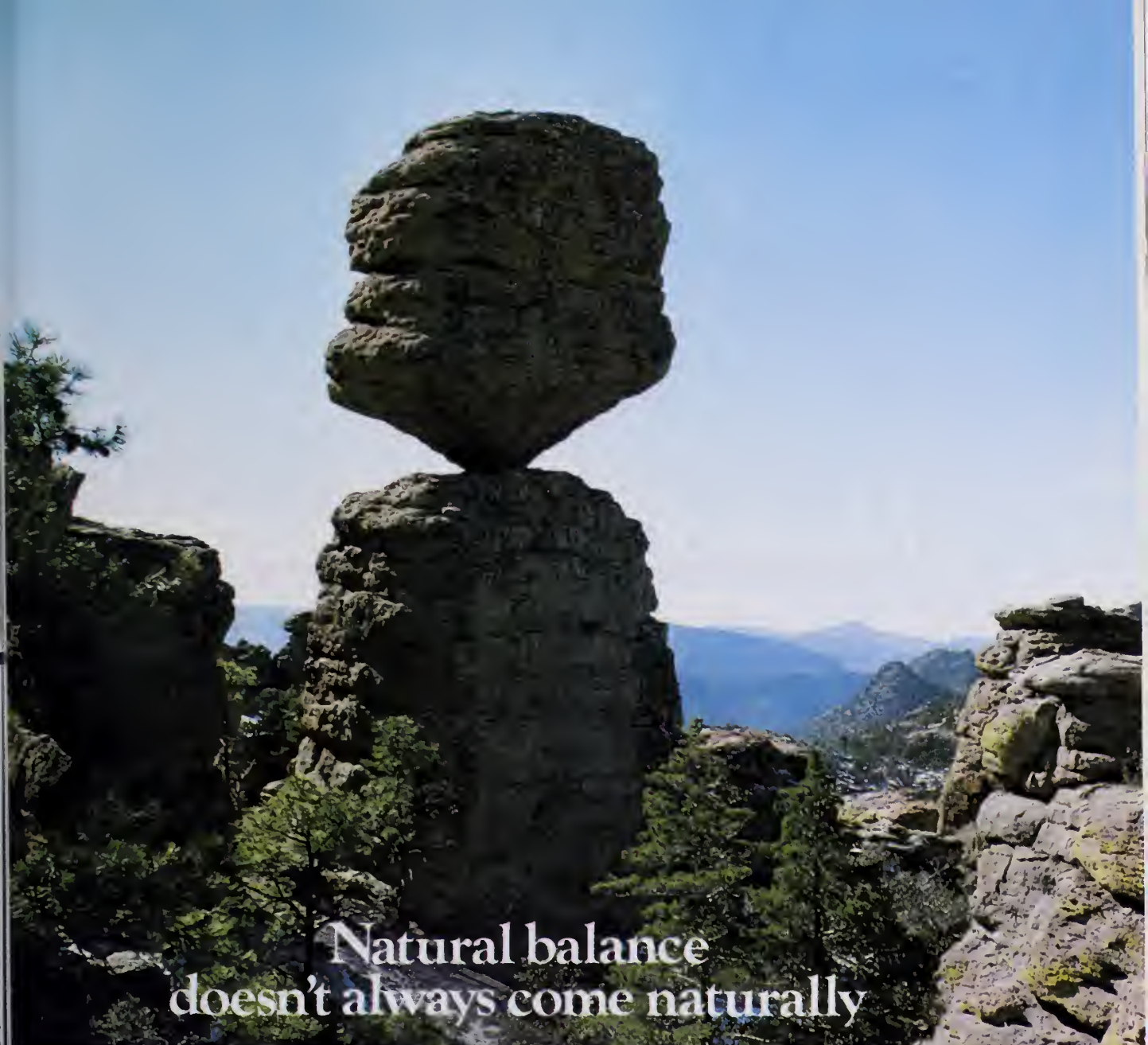
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Usage in Children: Clinical studies establishing safety and effectiveness in children have not been done; therefore, usage is not recommended in the pediatric age group.

Usage in Pregnancy: See "Contraindications."

ADVERSE REACTIONS. Drowsiness, dry mouth and, on rare occasions, blurred vision have been reported.

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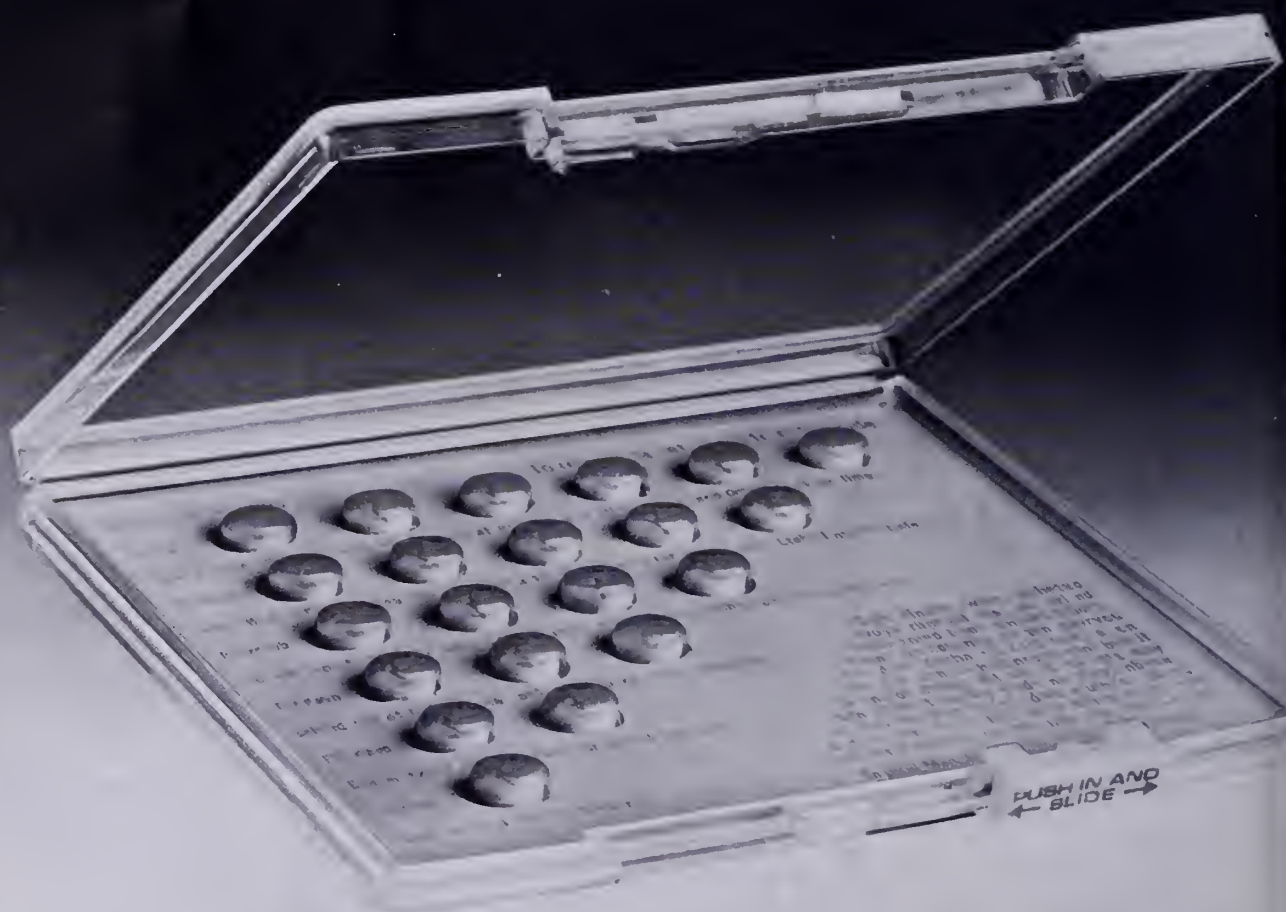
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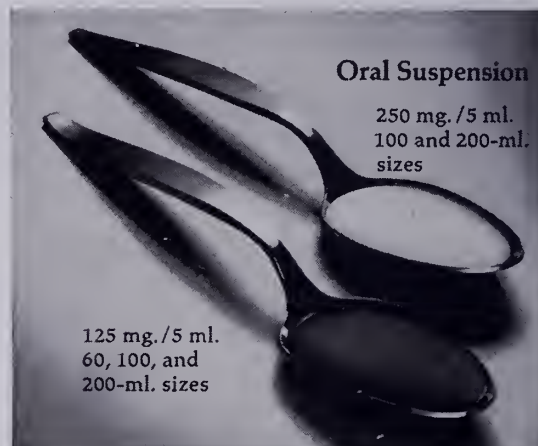
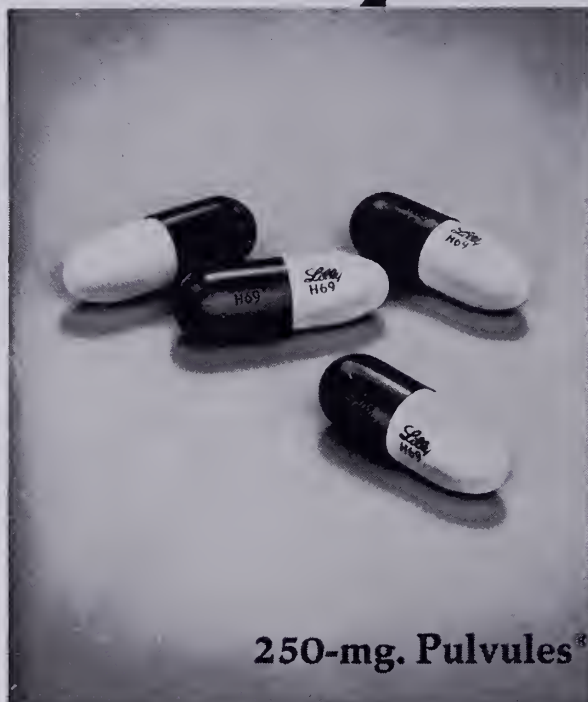
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Volume 75

JULY 1977

No. 7

Rheumatic Fever: A Continuing Health Problem in Kentucky†

JACQUELINE A. NOONAN, M.D. AND SUSANNE NORMAN, R.N.
Lexington, Kentucky

Rheumatic fever remains a continuing health problem in Kentucky. This report reviews 158 hospital admissions during 1974 and reviews the diagnostic features and recommended prophylactic treatment to prevent this serious disease.

WITH the advent of penicillin as an effective treatment for streptococcal infection, many believed that rheumatic fever would disappear.¹ There are many parts of this country where physicians in private practice have never seen a case of rheumatic fever and, indeed, the general attitude is that this disease is no longer a problem. It has, however, not disappeared. It is found where it has always been seen, among the poor, especially those living in crowded substandard conditions and often without easy access to quality medical care. Rheumatic fever remains a significant health problem in the Commonwealth of Kentucky. During the calendar year of 1974, there were 158 hospital admissions to the University of Kentucky Medical Center due to rheumatic fever or rheumatic heart disease (Table 1). This does not include a much larger group of patients seen in the out-patient department or at regional heart clinics.

Acute Rheumatic Fever

Acute rheumatic fever is a systemic disease that follows an inadequately or untreated group A

beta hemolytic streptococcal infection.² Diagnosis requires evidence of acute inflammation, a previous streptococcal infection, and a compatible clinical picture fulfilling the Jones Criteria³ (Table 2). There is no specific laboratory test for rheumatic fever but laboratory studies to document acute inflammation such as an elevated sedimentation rate or a previous streptococcal infection such as a streptozyme or ASO titer should be used as confirmatory evidence for this acute disease. Migratory polyarthritides with or without carditis is the most common clinical picture. Although the polyarthritides is self limited, permanent valvular and myocardial disease may follow acute rheumatic carditis resulting in later rheumatic heart disease. The disease is characterized by recurrent episodes unless streptococcal infections are prevented by appropriate prophylactic medication.

Table 1

ADMISSIONS TO U.K.M.C.—1974

| | NO. | AVG. AGE |
|-----------------------|-----|-----------|
| Acute Rheumatic Fever | 16 | |
| Children | 14 | 12.3 Yrs. |
| Adults | 2 | |
| R H D — Cardiac Cath | 59 | 40.7 Yrs. |
| R H D — Surgery | 45 | 44.3 Yrs. |
| R H D — Medical | 38 | 43 Yrs. |
| | 158 | |

Of the 16 patients admitted during 1974, all but two were children. There were 11 females and five males (Table 3). There were 11 with a primary episode of rheumatic fever and five with a recurrence. Eleven patients had carditis, eight polyarthritides, and four chorea. The high incidence of carditis in this group of patients reflects the patient population referred to the University of

†From the Department of Pediatrics, University of Kentucky Medical Center, Lexington

Received at KMA: 2-10-77

Table 2
MANIFESTATIONS OF RHEUMATIC FEVER
(Jones Criteria, revised)

MAJOR MANIFESTATIONS

Polyarthritis
Carditis
Chorea
Erythema Marginatum
Subcutaneous Nodules

MINOR MANIFESTATIONS

Fever
Arthralgia
Previous Rheumatic Fever or Rheumatic Heart Disease
Elevated Erythrocyte Sedimentation Rate or Positive C-reactive Protein Test
Prolonged P-R Interval

SUPPORTING EVIDENCE

Increase in Antistreptolysin O Titer or other Streptococcal Antibodies
History of Recent Scarlet Fever
Positive Throat Culture for Group A Streptococcus

Kentucky Medical Center. No doubt, some patients with acute rheumatic fever characterized only by polyarthritis were treated by their primary care physician without referral to a medical center.

Of the 11 primary cases of rheumatic fever, seven had evidence of carditis. On follow-up, most have a murmur of mitral insufficiency or aortic insufficiency but all of these patients are Class I and doing well at the present time. Three patients had chorea as the only major manifestation of rheumatic fever while one had chorea as well as a heart murmur. One 28-year-old adult had polyarthritis during his initial episode of rheumatic fever. All patients fulfilled the Jones Criteria for the diagnosis of rheumatic fever and all are currently on penicillin prophylaxis.

In five patients, the episode of rheumatic fever represented a recurrence. The oldest patient in this series was a 35-year-old woman who had her first attack of rheumatic fever at age 13 years. She was on penicillin prophylaxis for 10 years before it was discontinued. Ten years later, she developed a recurrence of rheumatic fever characterized by polyarthritis. She recovered well and has no evidence of rheumatic heart disease. The other four children with recurrent rheumatic fever all have evidence of severe rheumatic heart disease on follow-up. In fact, one patient has already required replacement of his aortic and mitral valve since this study was completed. With one exception, all patients experiencing recurrent rheumatic fever were not taking their prophylaxis regularly.

Primary cases of rheumatic fever are only partly preventable since the preceding streptococcal

infection may be subclinical and thus not recognized. Prompt and adequate treatment of all clinically apparent streptococcal infections, however, would further reduce the incidence of primary cases of rheumatic fever. Although recurrent attacks of rheumatic fever should be completely preventable, unfortunately, recurrences still occur.⁴ Effective rheumatic fever prophylaxis requires continuous physician supervision and constant patient compliance for many years.

Table 3

| ACUTE RHEUMATIC FEVER | |
|-----------------------|----------|
| Age 5-17 Yrs. | 14 |
| 28, 35 Yrs. | 2 |
| | <hr/> 16 |
| Sex 11 F, 5 M | |
| Initial Attack | 11 |
| Recurrence | 5 |
| | <hr/> 16 |
| Carditis | 11 |
| Polyarthritis | 8 |
| Chorea | 4 |

Rheumatic Heart Disease

Fifty-nine patients were admitted for cardiac catheterization and severe rheumatic heart disease was documented in each instance. Some of these patients have already undergone heart surgery and the rest will no doubt require operative intervention at some time in the future. Forty-five patients did undergo surgical treatment for rheumatic heart disease (Table 4).

In 12 patients with severe mitral stenosis, an open mitral commissurotomy (OMC) was carried out. Seventeen patients required mitral valve replacement (MVR) because of mitral stenosis, mitral insufficiency, or a combination of both. Seven patients had replacement of the aortic valve (AVR) for severe aortic insufficiency. Nine patients underwent multiple valve replacements. There was one surgical death and this occurred in a patient who underwent emergency double valve replacement and died three weeks later with sepsis. Although the other 44 patients survived surgery, in no way can they be considered cured of their rheumatic heart disease. Surgery for

Table 4

| SURGERY FOR R H D | |
|---|----------|
| Open Mitral Commissurotomy | 12 |
| Mitral Valve Replacement | 17 |
| Aortic Valve Replacement | 7 |
| Mitral and Aortic Valve Replacement | 6 |
| Mitral and Tricuspid Valve Replacement | 2 |
| Mitral, Aortic, and Tricuspid Valve Replacement | 1 |
| | <hr/> 45 |

Table 5

| MEDICAL ADMISSIONS | |
|----------------------------|----------|
| Congestive Failure | 21 |
| Atrial Fibrillation | 6 |
| Cerebral Vascular Accident | 9 |
| Digoxin Toxicity | 1 |
| Prolonged Bleeding Time | 1 |
| | <hr/> 38 |

rheumatic heart disease is, at best, palliative. Although successful surgery may result in dramatic clinical improvement, the risk of bacterial endocarditis, thromboembolism, malfunction of the artificial valve, or continuing myocardial failure, all remain potential problems. Thirty-eight patients were admitted to the hospital for a variety of medical reasons (Table 5), including congestive heart failure, atrial fibrillation, cerebral vascular accident, digitalis toxicity, or a prolonged bleeding time, illustrating again the guarded long term prognosis for patients with rheumatic heart disease.

Table 6

TREATMENT OF STREPTOCOCCAL INFECTIONS

1. Single intramuscular injection of benzathine penicillin at a dose of 600,000-900,000 units for children and 1.2 million units for adults.
2. Oral penicillin at dose of 200,000 or 250,000 units t.i.d. or q.i.d. for a full 10 days.
3. Erythromycin for penicillin-sensitive patients at a dose of 250 mg. q.i.d. for 10 days.
4. Although penicillin is the drug of choice, other effective drugs include ampicillin, lincomycin, cephalixin. All should be used for 10 days.
5. Tetracycline should not be used because of the high frequency of resistant strains. Although useful in prophylaxis, sulfonamides are not suitable for treatment of established infection.

Discussion

Although we did not attempt to calculate the enormous cost of the medical care of these patients, we did review the hospital bill of a single patient undergoing a double valve replacement. She had a relatively uneventful 15-day hospitalization. Her total medical bill in 1974 approximated \$10,000.00. She has had considerable clinical improvement but continues to spend approximately \$75.00 a month for needed medications. In addition to the cost of medical care, we should include the loss of productivity in these patients. As noted in Table 1, the average age of those admitted to the hospital because of rheumatic heart disease is about 42 years. Surely, the cost of penicillin to treat adequately all strepto-

coccal infections and the use of either penicillin or sulfa as prophylactic agents is an extremely wise investment. Table 6 lists the recommended treatment of streptococcal infections while Table 7 reviews the prophylactic regimen recommended by the American Heart Association.

Table 7

| RECOMMENDED PROPHYLACTIC REGIMENS | |
|--|--|
| DRUG | DOSAGE |
| Benzathine penicillin | 1,200,000 units by intramuscular injection once a month |
| Oral penicillin G | 200,000 to 250,000 units twice daily |
| Oral sulfadiazine | 0.5 gm/day for patients < 60 lb. 1.0 gm/day for patients > 60 lb. |
| Erythromycin (for patients sensitive to penicillin and sulfonamides) | 250 mg. twice daily |

In the Commonwealth of Kentucky, there is a statewide rheumatic fever prophylaxis program administered through the local health departments. Any patient with a history of rheumatic fever may receive prophylactic medication without cost on referral from a physician. This report is intended to emphasize the continuing problem of rheumatic fever in the Commonwealth of Kentucky and to review diagnostic features and recommended prophylactic treatment. Improvement in social conditions and increasing availability of medical care will continue to help but not completely solve the problem. Without more knowledge of the pathogenesis of rheumatic fever, especially the host factors involved, it is not yet possible to identify susceptible persons at risk to develop rheumatic fever. Hopefully, an effective vaccine to prevent streptococcal infections will be developed at some future time so that rheumatic fever may be completely eradicated. In the meantime, early diagnosis and prompt treatment of acute rheumatic fever followed by effective prophylaxis is our best hope for reducing the incidence of rheumatic heart disease.⁵

References

1. Markowitz M: Eradication of rheumatic fever: An unfulfilled hope. *Circulation* 41:1077-1084, 1970.
2. Markowitz M, Gordis L: *Rheumatic Fever*. Philadelphia, Saunders, 1972.
3. Jones criteria (revised) for guidance in the diagnosis of rheumatic fever. *Circulation* 32: 664-668, 1965.
4. Feinstein AR, Spagnuolo M, Jonas S, et al: Prophylaxis of recurrent rheumatic fever: Therapeutic-continuous oral penicillin vs. monthly infections. *JAMA* 206:565, 1968.
5. Noonan JA: Natural history of rheumatic heart disease in adolescents. *Postgraduate Medicine*, McGraw Hill, Inc. Vol. 56, No. 6, November 1974.

Treatment of Herpes Simplex Keratitis With a New Antiviral Agent—Vidarabine (Vira-A®)

GEORGE N. CHIN, M.D.*

Lexington, Kentucky

The results of a study comparing IDU with vira-A in the treatment of herpes simplex keratitis is reported.

AMONG the most common causes of corneal blindness in the United States is infection with the herpes simplex virus. Most often associated with cold sores, or fever blisters, the herpes virus infects the eyes of 300,000 Americans each year. Recurring attacks scar the cornea. Once blindness occurs, the only possible chance for restoring sight is a corneal transplant.

Herpes simplex keratitis has several clinical forms. The most common clinical ophthalmic presentations are the epithelial diseases in the forms of dendrites and the geographic or amoeboid ulcers. Herpetic stromal keratitis with or without iridocyclitis occurs in some patients and is frequently associated with severe ocular complications. The vast majority of herpetic keratitis is due to herpes simplex virus type 1. Genital strains (type 2) can also produce ocular infections.¹ Following an initial episode of herpetic keratitis, between 25% and 50% will have another attack within two years.^{2,3}

In 1962, Idoxuridine (IDU)⁴ was introduced as the first effective antiviral agent against ocular herpes simplex infection. IDU or 5-Iodo-2' deoxyuridine is a non-metabolic or fraudulent analogue of thymidine (Fig. 1). When introduced into the cellular medium where viral DNA synthesis is occurring, it is accepted as a thymidine equivalent and incorporated into the viral DNA. In this role, it either halts the replication process or produces non-infective virus particles. The efficacy of IDU in the treatment of herpetic keratitis has been well documented.^{2,5} However, IDU has not entirely solved the problem of ocular herpes

infection. Toxic and allergic² reactions often appear and limit the use of IDU in many patients. In some reported instances, the virus has grown resistant to the drug;^{6,7} moreover, its effect may be lost on deep herpetic infections within the eye. It is thus evident that a more effective and less toxic antiviral agent is needed for the treatment of herpetic keratitis. Among the more promising of the new agents now available is vidarabine (vira-A).

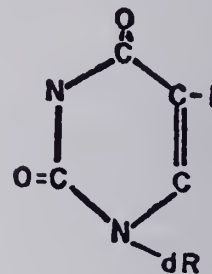


FIG. 1 Chemical structural formula of iododeoxyuridine (IDU).

Vidarabine (9-B-D-Arabinofuranosyladenine) is a white crystalline purine nucleoside (Fig. 2) derived from the organism, *Streptomyces antibioticus*. This drug has demonstrated in vitro and in vivo activity against many DNA viruses, including herpes simplex, vaccinia, and cytomegalovirus.^{8,9} It was first synthesized in 1960 as a potential anti-cancer drug.¹⁰ It has no known significant local or systemic toxicity when given locally or systemically in therapeutic concentrations. Studies have shown that it penetrates the cornea and anterior chamber well, whereas IDU exhibits rather poor penetration. Vidarabine maintains antiviral activity when deaminated to hypoxanthine arabinoside (ara-Hx), a more soluble metabolite which possesses 20% of the antiviral activities of vidarabine and IDU. IDU, on the other hand, is rapidly metabolized to uracil, a biologically inactive compound. There is no cross allergenicity between IDU and vidarabine and the latter drug does not adversely affect normal immune mechanisms.

At the University of Kentucky Medical Center

*Formerly, Chief, Ophthalmology Service, VA Hospital and the Department of Ophthalmology, University of Kentucky Medical Center, Lexington. Presently, Chief, Ophthalmology Service, VA Hospital, Seattle, Washington.

two clinical studies have been conducted over a period of three years. A double-blind study compared IDU and vidarabine in the treatment of active herpes simplex keratitis and an open-label study used vidarabine* in cases of IDU-resistant or IDU-intolerant herpes simplex infections. Two types of epithelial keratitis were represented in this series: dendritic keratitis and dendritic-geographic (ameboid) keratitis with or without stromal involvement or uveitis. Criteria for patient selection, therapeutic regimens, and methods of evaluation were published elsewhere.^{8,9,11,12}

A total of 36 patients, 29 males and 7 females, with an average age of 37, were represented in these two series. No statistically significant difference occurred in the comparative healing time between IDU (6.8 days) and vidarabine (8.0 days) in the double-blind study. There was a larger percentage (20%) of IDU treated patients who failed to re-epithelialize compared to the vidarabine treated group (2%). The studies also demonstrated a significant epithelial toxicity with IDU; however, no toxicity was seen in patients treated with vidarabine for as long as 28 days.

In the open study, 14 of the 26 patients in whom IDU treatment had failed, began to show re-epithelialization within two weeks, (average time, 12 days), after being switched to vidarabine. The keratitis in the open study group was generally more severe than among the vidarabine patients in the double-blind study. Sixty per cent of the patients had stromal uveitis, compared to 10% in the double-blind series. Incidence of dendritic-geographic ulcer was greater (9 out of 26 patients) and the dendrites were usually much larger (average size, 10 mm in length). Ninety-eight per cent of the dendrites and/or dendritic-geographic ulcers had completely re-epithelialized by the end of the second week (average 12 days) of vidarabine therapy, compared to eight days in the double-blind study. Moreover, vidarabine was better tolerated by the patients who had epithelial and stromal uveitis and were being treated with steroids. In none of these patients was there a breakdown of the epithelium or evidence of recurrence of disease. One patient developed dendrites while on IDU treatment.

On the basis of efficacy and safety, the following conclusions can be made. Vidarabine is an effective antiviral agent against herpes simplex

keratitis (actively multiplying viruses in the corneal epithelium). The epithelial toxicity of vidarabine is significantly less than that of IDU. In simple, uncomplicated herpes simplex keratitis, vidarabine is therapeutically equivalent to IDU; however, in complicated herpes simplex infection, vidarabine is safer and more efficacious than IDU. Vidarabine is of particular value when an antiviral agent must be used in combination with corticosteroids for complicated or deep herpes simplex infection within the eyes. In patients who are unresponsive to IDU, vidarabine is an effective drug.^{7,12} No patients with dendritic keratitis have been encountered who are resistant to vidarabine. The number of patients treated with vidarabine, however, has been smaller than those treated with IDU; and clinical resistance may eventually be encountered as it has been with IDU as more experience is gained with this new antiviral agent.

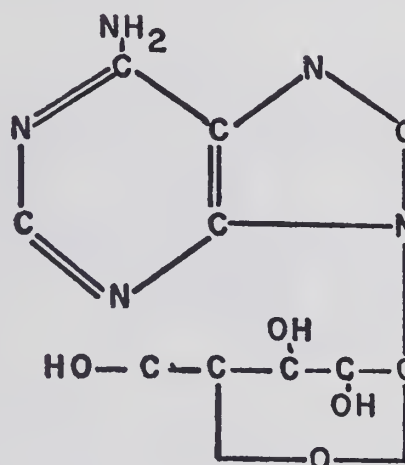


FIG. 2 Chemical structural formula of vidarabine (vira-A).

Most dendritic keratitis will heal within seven days if they respond to vidarabine. The antiviral agent should be continued for one week after apparent healing to prevent recurrence of the disease and should not be used for more than three weeks. A diffuse punctate keratitis, occurring after healing of the dendrite, may be a sign of drug toxicity rather than the recurrence of the infection.

Vira-A is available as a 3% sterile ophthalmic ointment, and has been recently approved by the FDA for commercial use.

Summary

A double-blind clinical study comparing IDU

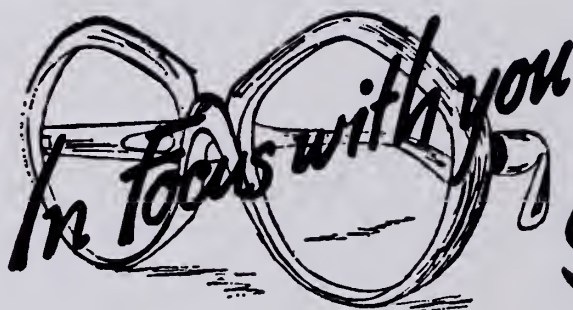
*Vidarabine was supplied by Parke, Davis & Co.

with vira-A in therapy of 10 herpes simplex keratitis patients and an open vira-A drug therapy study of 26 herpes simplex keratitis patients intolerant or resistant to IDU was carried out over a three-year period. There was no significant difference in healing time between IDU (6.8 days) and vira-A (8.0 days) in the double-blind study. In the open drug study, 26 patients were treated

with vira-A. All healed within the second week of therapy (12 days) with no adverse reaction. The study also demonstrated significant epithelial toxicity with IDU, but no toxicity was seen in patients treated with vira-A. Vira-A is of particular value when an antiviral agent must be used in combination with corticosteroids for complicated or deep herpes infection within the eye.

References

1. Oh, J. O. et al: Acute ocular infection with type 2 herpes simplex virus in adults. *Arch. Ophthalmol.* 93:1127, 1975.
2. Patterson, A. & Jones, B.R.: The management of ocular herpes. *Trans. Ophth. Soc. UK* 87:59, 1967.
3. Carroll, J.M. et al: Recurrence of herpetic keratitis following idoxuridine therapy. *Am. J. Ophthalmol.* 63:103, 1967.
4. Kaufman, H.E. et al: Use of 5-Ido-2-Deoxyuridine (IDU) in treatment of herpes simplex keratitis. *Arch. Ophthalmol.* 68:235, 1962.
5. Laibson, P.R. et al: An evaluation of double-blind IDU therapy in 100 cases of herpetic keratitis. *Trans. Am. Acad. Ophthalmol. & Otol.* 68:22, 1964.
6. Coleman, V.R. et al: Treatment of resistance to idoxuridine in herpetic keratitis. *Proc. Soc. Exp.-Biol-Med.* 129:761, 1968.
7. Chin, G.N. et al: Adenine arabinoside in IDU-resistant herpetic keratitis in humans. Association for Research in Vision & Ophthalmol. Sarasota, Florida, May 5, 1973.
8. Langston, O.P. et al: A double blind clinical study of adenine arabinoside therapy of viral keratoconjunctivitis. *Amer. J. Ophthalmol.* 74:81, 1972.
9. Adenine arabinoside: an antiviral agent, Ed. Pavan-Langston, D; Buchanan, R. A. & Aford, C.A.: Raven Press, New York, 1975.
10. Miller, F.A. et al: Antiviral activity of 9-B-D-arabino-furano-syladenine in cell culture studies. *Antimicrob. Agent Chemother.* 8:136, 1968.
11. Chin, G.N.: Treatment of herpes simplex keratitis with IDU and ARA-A, a double blind study. *Annals of Ophthalmol.* (in press).
12. Hyndiuk, R.A. et al: Adenine arabinoside in IDU-unresponsive and IDU-intolerant herpes simplex infection. *Amer. J. Ophthalmol.* 79:655, 1975.



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CASE REPORT

Foramen of Morgagni Hernias

ROYCE E. DAWSON, M.D., and C. WILLIAM JANSING, M.D.

Owensboro, Kentucky

Three cases of hernias through the foramen of Morgagni are reported including one case in which the hernia contained colon with a constricting adenocarcinoma.

Hernias through the diaphragm are fairly common x-ray and surgical findings. Most of these hernias are through the esophageal hiatus and the majority of these are either asymptomatic or are handled by conservative medical means and do not require surgical intervention. Harrington reported 430 cases of hernias through the diaphragm and only eight were through the foramen of Morgagni.¹ Hernias through the foramen of Morgagni are relatively rare and deserve an occasional review to remind us that they do occur and should be considered in the differential diagnosis of anterior, inferior, mediastinal abnormalities. These hernias are often visible on a routine chest x-ray or a high film of the abdomen and are very frequently asymptomatic. When they are visible on routine chest x-ray and are asymptomatic, they may be confused with other mediastinal disease entities. This discussion describes hernias of the foramen of Morgagni, their symptoms, etiology, embryology, and treatment, plus a report of three cases.

These hernias were first described by G. B. Morgagni in *Seats of Disease*, published in 1769.² The description came from the autopsy of an Italian stonecutter.

Definition and Anatomy

The hernias occur through a potential defect in the diaphragm called Foraminae of Morgagni or the spaces of Larrey (a surgeon to Napoleon). Through these spaces pass the superior epigastric branch of the internal mammary artery and vein plus lymphatics from the abdominal wall and the convex surface of the liver. (Fig. 1) These hernias

are direct in type, with a peritoneal sac, and most frequently occur on the right, although they can be bilateral. They are infrequently seen in childhood and can be confused with anterior, inferior, mediastinal tumors and on occasion have been confused with eventration of the diaphragm.

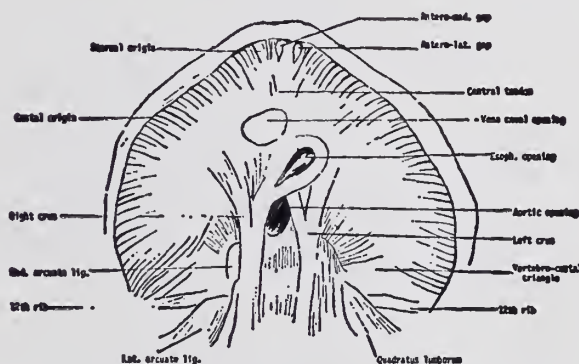


FIG. 1 In the diaphragm the small anterolateral gaps called the Foramen of Morgagni are seen.

Embryology

Embryology of these potential defects in the diaphragm has been reported in the literature and in embryology textbooks.³⁻⁵ Briefly, the musculature of the diaphragm begins at about the three millimeter stage in the embryo from myotomes that invade the mesenchyma from a dorsal to ventral direction, and the anterior part of the diaphragm is the last to receive its musculature. The ventral part of the diaphragm comes from the septum transversum, which begins in the neck and descends to approximately the level of the 12th rib where it fuses with mesodermal cells of the dorsal mesentery. The fact that the anterior part of the diaphragm is the last to receive its musculature may account for the weakened area in the retrosternal portion of the diaphragm. Harrington feels that these hernias are congenital even though they are rarely seen in childhood.¹

The rare occurrence of hernias on the left side has been explained by the fact that the pericardi-

um reinforces the left side of the anterior diaphragm. The rare occurrence of hernias on either side has been explained by the protective barrier of liver and a short transverse mesocolon.

Symptoms

There is usually a paucity of symptoms from hernias through the foramen of Morgagni. Most of these symptoms occur from the abdominal viscera that might be present in the hernia. These symptoms are usually vague but can be of an obstructive nature. Dyspnea can occur due to the size of the hernia, but this more frequently occurs in infants and children. These hernias frequently are asymptomatic and are found on routine investigation or on investigation of non-specific symptoms.

Etiology

The true etiology of this hernia is still controversial; Harrington feels that it is congenital, but others feel it is acquired. It is probably a combination, a congenital weakness being aggravated by obesity, stress, and trauma.

Frequency

The frequency of these hernias is low, less than 1% to 3% of all diaphragmatic hernias. Harrington, in his report of 430 cases of diaphragmatic hernias repaired surgically, found only eight cases through the foramen of Morgagni.¹ The Mayo Clinic reports an incidence of 3%.⁵ The incidence varies, according to all diagnosed cases and those repaired surgically.

Diagnosis

One must consider this lesion in a differential diagnosis of all anterior, inferior, mediastinal masses. Differential diagnosis should include pleural pericardial cysts, pericardial fat pad, mediastinal lipoma, diaphragmatic cysts or tumors, thymoma, and mesothelioma. Sac contents can include omentum, transverse colon, stomach, liver, and small bowel. If gas is seen in the anterior and inferior mediastinum, the lesion should be suspected. The diagnosis is usually confirmed by gastrointestinal series or by barium enema. Occasionally a liver scan may confirm the diagnosis of liver in the hernial sac.⁷ Pneumoperitoneum might be used as a diagnostic tool. Several



FIG. 2 Case 2. Foramen of Morgagni hernia containing colon with a constricting adenocarcinoma.

cases have been reported in which the mediastinum was being explored for tumor and the lesion was found through the foramen of Morgagni.

Treatment

The treatment is surgical with the preferred approach through the abdomen through a midline or paramedian incision. These hernias can also be repaired transthoracically. The contents of the hernia sac should be reduced, and it may occasionally be necessary to enlarge the neck of the sac or to insert a catheter into the hernia sac to allow reduction of the contents. The hernia sac should be removed, if possible, and one should be alert to the possibility that pneumothorax can occur in an attempt to remove the sac. The defect can usually be repaired directly using non-absorbable suture in approximating the edges of the diaphragm. One may find it necessary to approximate the edges of the diaphragm to the anterior chest wall or to the posterior rectus sheath. Larger

spaces may require some sort of prosthetic material for repair. Harrington has advised that fascia lata be used for repair.¹

Case Reports

The following cases have been encountered by a surgical specialty group during a two-year period ending in 1974.

Case #1: A 48-year-old white female was referred with an asymptomatic anterior and inferior mediastinal mass. Physical examination was not remarkable. Bronchoscopy and bronchogram were non-revealing. Exploration was through the right chest, and a hernia through the foramen of Morgagni was found containing omentum. The hernia was repaired, and the postoperative course was uneventful.

Case #2: A 67-year-old white female was seen by her family physician because of general malaise and anemia. Barium enema showed a hernia through the foramen of Morgagni containing transverse colon with a constricting lesion. (Fig. 2) The patient was explored transabdominally and was found to have colon in the hernia sac. The colon contained a carcinoma and metastatic tumor was found in the liver. The hernia was reduced and repaired, and the lesion of the transverse colon was resected. Postoperative course was uneventful.

Case #3: A 66-year-old white male was seen

because of shortness of breath and general malaise. Barium enema revealed a hernia through the foramen of Morgagni containing colon. The hernia was repaired transabdominally without incident. The patient expired suddenly on the seventh postoperative day from what was felt to be a pulmonary embolus.

Summary

The history, anatomy, embryology, symptoms, and diagnosis of hernias through the foramen of Morgagni have been reviewed. The treatment of this hernia has been described; and three actual cases have been reported, including one with a carcinoma of the colon in the hernia.

References

1. Harrington, S. W. Various types of diaphragmatic hernia treated surgically: A report of 430 cases. *Surg. Gyn. & Obst.*, 86: 735-755, 1948.
2. Morgagni, G. B. *Seats and Causes of Diseases*, Translated by Benjamin Alexander, London, A. Miller and T. Cadell, Vol. 3, p. 205, 1769.
3. Barrett, N. R. and Wheaton, C. E. W. The pathology, diagnosis, and treatment of congenital diaphragmatic hernia in infants. *Brit. J. Surg.* 21: 420, 1934.
4. Brown, R. W. Case of bilateral parasternal diaphragmatic hernia. *Thorax*, 7: 266, 1952.
5. Gross, R. E. *The surgery of infancy and childhood: Its principles and techniques*. W. B. Saunders Co., Philadelphia, p. 429-447, 1953.
6. Comer, T. P. and Claggett, O. T. Surgical treatment of hernia of the foramen of Morgagni. *J. Thor. & Cardiovascular Surgery*, 52: 461, 1966.
7. Comer, T. P., Schmalhorst, W. R. and Arbogast, N. R. Foramen of Morgagni hernia diagnosed by liver scan. *Chest*, 63: 1036, 1973.

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The bylaws of the Kentucky Medical Association provide that all scientific discussions and papers read before the KMA Annual Meeting shall be referred to the KMA Journal for consideration for publication. The bylaws further state that the editor or the associate editor may accept or reject these papers as it appears advisable and return them to the author if not considered suitable for publication.

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EDITORIAL

About Those Sick Physicians

AS I hurried through O'Hare the headline shouted through the newspaper vendors "One Doctor In Nine Is An Alcoholic." It was only grist for that day in Chicago's scandalous News Mill and by midnight the janitors had swept out the tatters. Sadly, from inside our great profession, no amount of tidying up will do. We must go back to our old crafts of diagnosis and treatment and apply them, when necessary, to ourselves.

Perhaps one in nine is too high—at least for our State. But none doubt that medicine's own alcohol and drug abuse is a painful problem that we have just tried to live with and ignore. We can't do that anymore. Nor can we ignore the illnesses of brain disease and psychic disorders.

The KMA Committee on Physicians' Health can't be just a cosmetic and PR gimmick for many reasons.

For one, KMA Headquarters must field an incredible number of complaints from all over our State. Our citizens need to know that we ignore no complaint and that we act firmly on the just ones.

Families of physicians are often deeply concerned about the physician member. Yet, for fear and embarrassment, they may feel incapable of confronting the one in trouble. So the family is battered, at least emotionally; relationships are warped, marriages die.

Denial is a defense we often use in illness. The physician who simply denies his own heart disease or malignancy is soon dealt with by the Grim Reaper. Denying a lesser physical disturbance often takes admirable courage and may keep one functioning.

But denial of substance-abuse or psychic disturbance is surely a risk to that physician's patients as well as to himself; morally as well as legally we cannot endorse our comrade's denial by ignoring it.

In some states the pressure for action has led

to legislation to deal with sick physicians and the AMA offers model legislation. Since most of us feel our great nation already has far too many laws, one hopes we can do without a Sick Physician Law in Kentucky. At least we must first do our quiet best to prove that we can help meet the needs of a faltering brother or sister physician without some clumsy law telling us how.

For these reasons the Physicians' Health Committee must serve much more than a cosmetic function. Lacking any mandated authority it seeks to persuade, to suggest approaches to the troubled ones, and to return a healthy physician to function whenever possible. Our approach will be quite different from the Board of Licensure with its formal authority. But we cannot function without your help in identifying that one whose sickness influences his practice and medicine's reputation.

Probably all of us have seen a fellow physician whose own illness makes him unsafe to practice. But few of us have taken upon ourselves the embarrassment, the inconvenience, and even the risk of trying to help. It is here that this Committee seeks to serve. In a kindly, supportive, nonpunitive way we wish to help heal or, failing that, help with the individual's personal decision to retire.

However, the Committee cannot function, the problem physician cannot be helped, unless you, his associate, help bring the problem to the attention of those involved—that is, the sick one, responsible family members, the area trustee, and the committee, preferably in that order.

Let's do it this way. If you know a sick physician then approach this one directly, taking along one or two other associates and discuss the situation kindly. Often it might be wise to include close family members as you express your concern. Suggest evaluation and treatment. Don't close doors unless no treatment is feasible.

Now we know this will not always work. In

that case discuss it with the Trustee from your area.

If the problem remains unsolved call KMA—Telephone (502) 459-9790—ask for Bob Klinglesmith, and tell him of the problem so that he can bring it before this Committee. If there is a chance it will help, the Committee will seek a personal interview with the doctor. Only when there is a persistent lack of cooperation will the situation be referred to the Board of Licensure.

It is the difficult task of each of us to deal with these problems forthrightly. The faltering physician is a problem, an embarrassment, and a risk to himself and to our entire profession as well, and it is not fair nor humane to ignore him.

There are, therefore, a number of compelling reasons why we must confront the problem of the sick physician. But the basic reason, the one which we cannot ignore, is simply that it is Right.

DAVID STEWART, M.D.,
Chairman, KMA Committee on Physicians' Health

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FROM THE EDITOR'S NOTEBOOK

Notes of medical and professional interest from a cross-section
of America's journals.

"We must be doing some things right, and there seems room for some cautious optimism."—David E. Rogers

The Robert Wood Johnson Foundation, a national philanthropy with objectives that include the improvement of medical care in America, presented its Annual Report 1976 over the signature of the Director, David E. Rogers, M.D., formerly of the Medical School at Vanderbilt and Johns Hopkins. A copy of the preface to this report came across my desk and when I saw his signature, I started reading because whenever Rogers speaks or writes I try to listen intently and read diligently. The copy is referred to in Frank Lemon's thoughtful Letter to the Editor of May 17, 1977. (See page 343). It is a pity that all of us cannot read and study this encouraging document.

In reporting on progress in American health affairs, Rogers takes a "before and after" look at the national problems: 1) the difficulties that many people were experiencing in obtaining prompt and appropriate general medical care, 2) the quality of that care, and 3) the absence of sound, objective information on which to base public policy decisions regarding health matters. The mission of the Foundation was "to make ambulatory care a high priority for the health institutions and professions and for many of the other people working on health matters."

To assess the solution to the problems, it is recognized that "things do change and sometime for the better." Real progress has been made to improve ambulatory care services and these services are more readily available to the poor and minority groups. In brief, "the health status of Americans is improving" and "our American system—composed of multiple, independent institutions and people going at problems in their own way—does work, and perhaps better than we are wont to recognize." These are statements of encouragement for our profession and statements for expectant optimism in those seeking medical care!

And what of these changes for the better—the before and after picture. Studies reveal that physicians are more accessible and especially more accessible for those whose medical needs are great, the low-income and minority groups. The shortage of health professionals is being dealt with effectively with medical schools increasing the number of physicians in training by 50% and the enrollment in nursing schools has increased by 52%, all with training designed to allow nurses to assume

a greater role in patient care. Rogers refers to the new kinds of health workers, especially the physician's assistants, who will help deliver more and better health care. With pride, I note that the Frontier Nursing Service in our state came in for some honorable mention in the report because they "succeeded in reducing infant deaths in a poverty stricken, remote, rural area by an organized system of nurse and midwife care." In another area the need for hospitalization of children was reduced by 36% via a new comprehensive child care program.

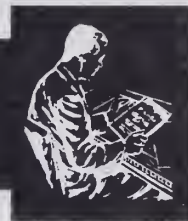
To emphasize the effects of change, the report cites the decline in death rates, fall in infant and maternal mortality rates, and "downward trends in deaths due to strokes, diabetes, and peptic ulcers, as well as coronary artery disease." The report notes the impressive decrease in cigarette smoking among young men 21-24 years of age but does not list the health advantages of seat belt-shoulder strap wearing nor the efficacy of dietary alterations.

Appropriately and fairly the report is distressingly aware of the rise in health care costs—"An average hospital stay cost of \$311 in 1965. It was \$1,017 in 1975." Do you wonder what figure applies in mid-1977? Distressing too is the overall failure of providing health care in rural areas and to the dependent children and elderly in the low-income groups. Although some problems are being solved or are solved in part, there are more problems on the "agenda for the future." "The time for learning and experimentation and gaining experience comes before national consensus and decision-making."

On the basis of their experience, the Foundation believes that "diverse groups focusing on the same problem can produce a variety of imaginative and encouraging potential solutions to larger national problems." If indeed we are "a terribly self-critical nation," perhaps that criticism is the necessary force, the impetus, that propels us to tackle a problem and solve it—the American system! We are doing some things right! David Rogers concludes the preface to Annual Report 1976 with the hope "that we can discard the feeling that our social institutions are unable to cope with national problems." I share that hope and believe there is room for optimism.



MATERNAL MORTALITY



From the Files of the KMA Maternal Mortality Study Committee

—Edited by John W. Greene, Jr., M.D.

4-73. The patient is a 24-year-old Caucasian, Gravida III, Para II, who was approximately at 18 weeks gestation. Her past history and previous pregnancies were uncomplicated. When seen by her physician approximately two weeks prior to admission, she was thought to be having a normal prenatal course.

On the day of admission, the patient was brought to the Emergency Room where she was noted to be having convulsions and severe respiratory failure. The pulse was faint and rapid and the blood pressure was undetectable. Rales were heard throughout the chest and intercostal retractions were prominent. She was immediately intubated and a cardiothoracic surgeon was called in for consultation. A large amount of greenish fluid was aspirated from the endotracheal tube. The presumptive diagnosis was aspiration pneumonia.

The patient's mother gave the following retrospective history. The patient had been in good health until the day prior to admission. She awoke with a severe ache in her legs and pain across her back. She called her physician who prescribed a medication the name of which is unknown, probably an analgesic. At noon on the day prior to admission, the patient was reported to be quite sick, continuing to complain of pain in her back and legs. The mother detected that the patient was extremely hot and then began experiencing marked chills which became severe despite several blankets. The patient complained of no other symptoms. There was occasional vomiting with question of hematemesis. On the evening prior to admission, the patient became unconscious and there was also evidence of convulsion with loss of bladder and bowel function. She was brought to the Emergency Room at 11:45 p.m.

With the presumptive diagnosis being aspiration pneumonia, the patient was admitted to intensive care, was placed on a respirator, and was started on antibiotics. She initially received 4 gms cephalothin intravenously followed by 2 gms every 6 hours.

A neurological examination revealed no localizing signs. Examination of the spinal fluid revealed an opening pressure of 70 cm of water and the spinal fluid was grossly bloody. On the following day, her blood pressure remained imperceptible, her pulse faint and rapid, and her respiratory rate was 28/minute. The patient was disoriented and confused and showed signs of nuchal rigidity. The impression at this time consisted of overwhelming sepsis with peripheral vascular collapse, renal failure, aspiration pneumonia, and possible meningitis.

A stillborn fetus was delivered approximately 8 hours after admission. A foul odor was detected at the time of delivery and amnionitis was suspected. The placenta did not pass spontaneously and intramuscular and intravenous oxytocin was used as an aid for expulsion.

Intravenous fluids were continued with periodic intravenous antibiotics including cephalothin and penicillin. In view of the decreased renal output, only one dose of gentamycin was administered. Large doses of steroids and also alpha stimulating sympathomimetics were administered to combat the vascular component of her infection.

In spite of the treatment outlined, the patient experienced cardiac arrest and cardiopulmonary resuscitation was unsuccessful. The presumed cause of death was septicemia of unknown etiology. The family refused post mortem examination.

Without more specific clinical and laboratory information and particularly post mortem findings, the cause for this patient's demise remains conjectural. The descriptive history of fever and chills probably do represent septicemia but the source of the infection remains unknown. In the pregnant patient, intrauterine infection must always be considered and manipulations to induce termination of pregnancy suspected. The patient's mother gave no history that the patient wished to terminate the pregnancy and there were no physical findings suggesting an attempt to induce an abortion. A viral pneumonia can also be a possible cause of precipitous deterioration but the patient gave no indications of pulmonary symptoms prior to the onset of convulsions and the pulmonary findings found at physical examination were probably secondary to aspiration. Another cause of septicemia frequently encountered is pyelonephritis. This patient's initial symptoms of leg and back pain are suggestive of either early labor or kidney infection.

Comments

The Committee on Maternal Mortality classified this as an obstetrical death which was possibly preventable. History and physical examination at the time of the onset of symptoms may have revealed a source of infection with treatment started in time to prevent the more serious sequelae. Procrastination by the family in reporting the onset of more serious complications is also evident.

The obvious difficulty in evaluating this case stems
(Continued on page 344)

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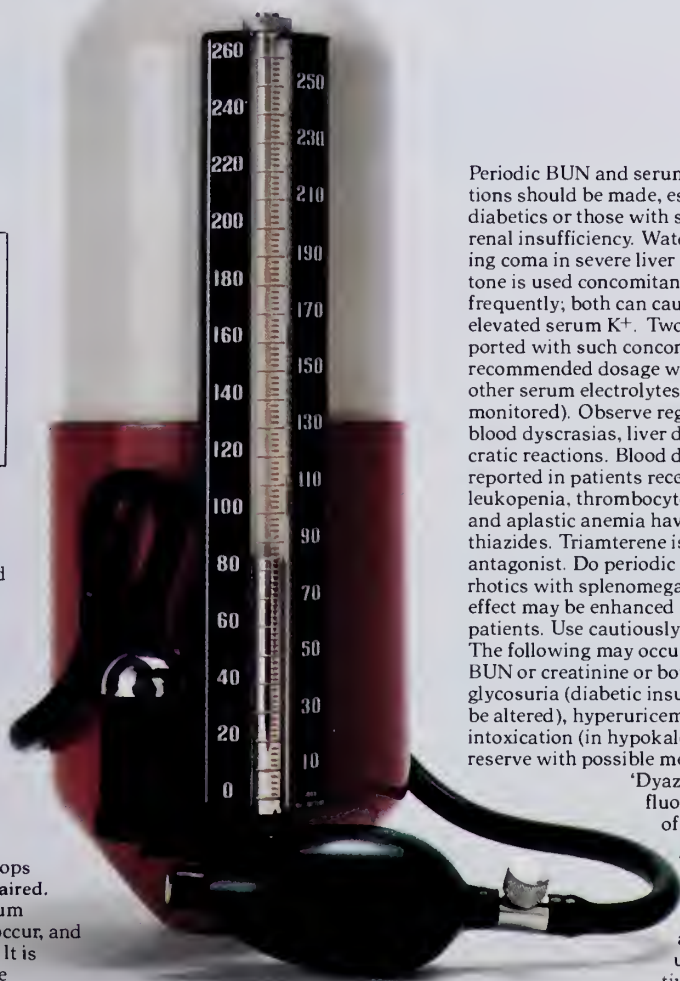
This drug is not indicated for initial therapy of edema or hypertension. Edema or hypertension requires therapy titrated to the individual. If this combination represents the dosage so determined, its use may be more convenient in patient management. Treatment of hypertension and edema is not static, but must be reevaluated as conditions in each patient warrant.

Indications: When the combination represents the dosage determined by titration: Adjunctive therapy in edema associated with congestive heart failure, hepatic cirrhosis, the nephrotic syndrome. Corticosteroid and estrogen-induced edema, idiopathic edema; hypertension, when the potassium sparing action of triamterene is warranted. (See Box Warning.) Routine use of diuretics in healthy pregnant women is inappropriate; they are indicated in pregnancy only when edema is due to pathological causes.

Contraindications: Further use in anuria, progressive renal or hepatic dysfunction, hyperkalemia. Pre-existing elevated serum potassium. Hypersensitivity to either component or other sulfonamide-derived drugs.

Warnings: Do not use potassium supplements, dietary or otherwise, unless hypokalemia develops. If dietary intake of potassium is markedly impaired, supplementary potassium is needed, potassium supplements should not be used. Hyperkalemia can occur, and has been associated with cardiac irregularities. It is more likely in the severely ill, with urine volume less than one liter/day, the elderly and diabetics with suspected or confirmed renal insufficiency. Periodically, serum K^+ levels should be determined. If hyperkalemia develops, substitute a thiazide alone, restrict K^+ intake. Associated prolonged QRS complex or arrhythmia requires prompt additional therapy. Thiazides cross the placental barrier and appear in cord blood. Use in pregnancy requires weighing anticipated benefits against possible hazards, including fetal or neonatal jaundice, thrombocytopenia, other adverse reactions seen in adults. Thiazides appear and triamterene may appear in breast milk. If their use is essential, the patient should stop nursing. Adequate information on use in children is not available.

Precautions: Do periodic serum electrolyte determinations (particularly important in patients vomiting excessively or receiving parenteral fluids).



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Periodic BUN and serum creatinine determinations should be made, especially in the elderly, diabetics or those with suspected or confirmed renal insufficiency. Watch for signs of impending coma in severe liver disease. If spironolactone is used concomitantly, determine serum K^+ frequently; both can cause K^+ retention and elevated serum K^+ . Two deaths have been reported with such concomitant therapy (in one, recommended dosage was exceeded, in the other serum electrolytes were not properly monitored). Observe regularly for possible blood dyscrasias, liver damage, other idiosyncratic reactions. Blood dyscrasias have been reported in patients receiving triamterene, and leukopenia, thrombocytopenia, agranulocytosis, and aplastic anemia have been reported with thiazides. Triamterene is a weak folic acid antagonist. Do periodic blood studies in cirrhotics with splenomegaly. Antihypertensive effect may be enhanced in post-sympathectomy patients. Use cautiously in surgical patients. The following may occur: transient elevated BUN or creatinine or both, hyperglycemia and glycosuria (diabetic insulin requirements may be altered), hyperuricemia and gout, digitalis intoxication (in hypokalemia), decreasing alkali reserve with possible metabolic acidosis.

*Dyazide® interferes with fluorescent measurement of quinidine.

Adverse Reactions:

Muscle cramps, weakness, dizziness, headache, dry mouth; anaphylaxis, rash, urticaria, photosensitivity, purpura, other dermatological conditions;

nausea and vomiting, diarrhea, constipation, other gastrointestinal disturbances. Necrotizing vasculitis, paresthesias, icterus, pancreatitis, xanthopsia and, rarely, allergic pneumonitis have occurred with thiazides alone.

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 tion, a summary of which follows:

Indications: Acute, recurrent or chronic urinary tract infec-
 tion (primarily pyelonephritis, pyelitis and cystitis) due to
 susceptible organisms (usually *E. coli*, *Klebsiella-Aerobacter*,
Staphylococcus, *Proteus mirabilis* and, less frequently,
Proteus vulgaris), in the absence of obstructive uropathy or
 other complicating factors. Note: Carefully coordinate *in vitro* sul-
 famide sensitivity tests with bacteriologic and clinical
 response; add aminobenzoic acid to follow-up culture
 to overcome the increasing frequency of resistant organisms
 and to demonstrate usefulness of antibacterials including sul-
 famides, especially in chronic or recurrent urinary tract
 infections. Measure sulfonamide blood levels as variations
 in serum level: 20 mg/100 ml should be maximum total level.

Contraindications: Sulfonamide hypersensitivity; preg-
 nancy and during nursing period; infants less than
 2 months of age.

Warnings: Safety during pregnancy has not been estab-
 lished. Sulfonamides should not be used for group A
 streptococcal infections and will not eradi-
 cate sequelae (rheumatic fever, glomerulone-
 phritis) of such infections. Deaths from hypersensitivity reac-
 tions, agranulocytosis, aplastic anemia and other blood
 dyscrasias have been reported and early clinical signs
 (fever, pallor, purpura or jaundice) may indi-
 cate serious blood disorders. Frequent CBC and urinalysis
 and microscopic examination are recommended during
 therapy. Insufficient data on children under
 2 years of age with chronic renal disease.

Precautions: Use cautiously in patients with impaired renal
 function, severe allergy, bronchial asthma; in glu-
 cose-6-phosphate dehydrogenase-deficient individuals in
 whom hemolysis may occur. Maintain ade-
 quate fluid intake to prevent crystalluria and stone formation.

Adverse Reactions: Blood dyscrasias (agranulocytosis,
 anemia, thrombocytopenia, leukopenia, hemolytic
 purpura, hypoprothrombinemia and methemo-
 globinemia); allergic reactions (erythema multiforme, skin
 necrosis, epidermal necrolysis, urticaria, serum sickness,

pruritus, exfoliative dermatitis, anaphylactoid reactions,
 periorbital edema, conjunctival and scleral injection,
 photosensitization, arthralgia and allergic myocarditis);
gastrointestinal reactions (nausea, emesis, abdominal
 pains, hepatitis, diarrhea, anorexia, pancreatitis and
 stomatitis); *CNS reactions* (headache, peripheral neuritis,
 mental depression, convulsions, ataxia, hallucinations, tin-
 nitus, vertigo and insomnia); *miscellaneous reactions*
 (drug fever, chills, toxic nephrosis with oliguria and anuria,
 periarteritis nodosa and L.E. phenomenon). Due to certain
 chemical similarities with some goitrogens, diuretics
 (acetazolamide, thiazides) and oral hypoglycemic agents,
 sulfonamides have caused rare instances of goiter pro-
 duction, diuresis and hypoglycemia as well as thyroid
 malignancies in rats following long-term administration.
 Cross-sensitivity with these agents may exist.

Dosage: Systemic sulfonamides are contraindicated in
 infants under 2 months of age (except adjunctively with
 pyrimethamine in congenital toxoplasmosis). *Usual adult*
dosage: 2 Gm (2 DS tabs or 4 tabs or 4 teasp.) initially,
 then 1 Gm *b.i.d.* or *t.i.d.* depending on severity of infec-
 tion.

Usual child's dosage: 0.5 Gm (1 tab or teasp.)/20 lbs of
 body weight initially, then 0.25 Gm/20 lbs *b.i.d.* Maximum
 dose should not exceed 75 mg/kg/24 hrs.

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ASSOCIATIONAL NEWS

Highlights of 1977 Annual Meeting—September 26-29 Include Scientific Program, President's Luncheon

Final arrangements are now being made for the 1977 KMA Annual Meeting to be held September 26-29 at the Bluegrass Convention Center/Ramada Inn in Louisville. The annual session, which actually opens on Sunday, September 25, with a meeting of the Board of Trustees followed by the first session of the House of Delegates on September 26, has many timely features of interest to the practicing physician.



Mr. Nutt

An outstanding scientific session beginning on September 27 will include over 25 individual presentations by nationally recognized authorities on such topics as cardiovascular problems, cancer, and alcoholism. Nineteen specialty groups will hold afternoon meetings on September 27 and 29 and over 80 scientific and technical exhibits will be displayed for the educational benefit of those in attendance. Continuing medical education credit may be obtained through the American Medical Association Physician's Recognition Award and the American Academy of Family Physicians.

Another traditional highlight of the meeting is the President's Luncheon set for Wednesday, September 28, at 11:50 a.m. in the Bluegrass Convention Center. This year's featured speaker is humorist and entertainer, Grady Nutt, a native of Amarillo, Texas, who now lives in Louisville. Mr. Nutt, who has made numerous television appearances, is the author of several books and the producer of two albums and four documentary pictures. He received his Master of Divinity degree from Southern Baptist Theological Seminary in 1964 and for five years following served as Assistant to the President at the Seminary.

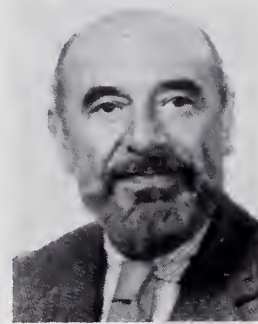
Other features of this year's meeting include two sessions of the House of Delegates, the annual convention of the Auxiliary to KMA, University of Louisville School of Medicine alumni reunions, and the annual KEMPAC Seminar.

Two of the speakers on the Thursday, September 29, session are Peyton Weary, M.D., Charlottesville, and Maxwell Weisman, M.D., Baltimore.

Doctor Weary, Chairman of the Department of Dermatology at the University of Virginia School of Medicine, will speak on "So, You've All Heard of



Doctor Weary



Doctor Weisman

Acanthosis Nigricans, But There Are Other Ways Internal Cancer Can Affect the Skin." A member of the Board of Directors of the Society for Investigative Dermatology, Doctor Weary is Secretary-Treasurer of the Association of Professors of Dermatology.

A national authority on alcoholism, Doctor Weisman is a faculty member of the Department of Psychiatry at Johns Hopkins University and the University of Maryland. He is a Past President of the American Medical Society on Alcoholism and has published numerous articles related to psychiatry, psychoanalysis, and alcoholism. A Diplomate of the American Board of Neurology and Psychiatry and a Fellow of the American Psychiatric Association, he will speak on "What Every Physician Should Know About Drinking Problems and Alcoholism."

Complete details of the 1977 KMA Annual Meeting, including the final scientific program, will be featured in the August issue of *The Journal*.

KMA Seeks To Update Medicare Reimbursement Policy

Health Education and Welfare representatives met with KMA Officers and staff on May 18 in Washington to discuss Kentucky's Medicare problems. The meeting, which was a result of actions taken by the Special Session of the House of Delegates on February 10, was set up by U.S. Congressman Tim Lee Carter, M.D., and took place in his office. Those present at this meeting were Harold Fishman, Deputy Director of Provider and Medical Services, Office of Program Policy; Paul Rusil, Chief of Medical Services Reimbursement, Bureau of Health Insurance, and other HEW staffers.

The central issue of the meeting was unequal reimbursement to physicians participating in the Medicare program and a lengthy discussion was held on the problems as perceived by KMA and which are shared by Doctor Carter.

The HEW representatives indicated that they had initiated a full review of physician's fees and payments in Kentucky and would be prepared to better consider the situation when this data is compiled. They stated that the study would be completed by July 1.

As one step of a four-part plan developed by the Board of Trustees to implement the Medicare resolution passed by the House of Delegates, the meeting served to direct national attention to Kentucky's situation. Prior to these discussions KMA Officers and staff met with both Kentucky Senators and all seven Congressmen to relate the problems presented by the Medicare program and left each legislator background material that indicated KMA's efforts to improve the Program. All expressed concern and interest, and there was some encouragement for further investigation of the Medicare program and its operation.

A resolution has also been submitted to the American Medical Association seeking assistance from the national level and ongoing communications are being held with Metropolitan, the Medicare intermediary in Kentucky.

1977 Scientific Program Outline Released for Annual Meeting

The preliminary scientific program for the 1977 KMA Annual Meeting has been released and is presented below for your general information. Each half-day session will feature a 30-minute intermission to allow physicians time to visit technical and scientific exhibits.

TUESDAY, SEPTEMBER 27—Morning Session

THEME: "Cardiovascular Problems"

- "Coronary Arteriography"—Harry Page, Jr., M.D., Nashville
- "The Cardiac Patient Coming to Surgery—What to Do About His Drug Therapy"—John Tinker, M.D., Rochester
- "Coronary Artery Bypass"—Henry Bahnson, M.D., Pittsburgh
- "Recent Developments in Echocardiography"—Richard Kerber, M.D., Iowa City
- "Long-Term Results After Surgery for Congenital Heart Disease"—Samuel Kaplan, M.D., Cincinnati
- "Clinical Use of Intracardiac ECG Recording"—Phillip Samet, M.D., Miami Beach

Nine of the 19 participating specialty groups will meet simultaneously at 1:30 p.m. No general scientific session will be held at that time.

WEDNESDAY, SEPTEMBER 28—Morning Session

- "The Evolution of the Total Knee Replacement"—Roderick Turner, M.D., Boston
- "Renal Autotransplantation and Bench Surgery"—Ralph Straffon, M.D., Cleveland
- "Hypercalcemia and Hyperparathyroidism—Diagnosis

- and Treatment"—Sanford Roth, M.D., Little Rock
- "Office Management of Acute Hand Injuries"—Paul Weeks, M.D., St. Louis
- "Differential Diagnosis of Acute Oral Ulcerations"—Richard Miller, D.M.D., Louisville
- "Ultrasound of the Abdomen and How Does It Compare to Catscan"—Harendra Nath, M.D., Lexington

Afternoon Session

THEME: "Cancer"

- "The National Cancer Plan: Research Accomplishments"—Bayard Morrison, M.D., Bethesda
- "Practical Aspects of Improved Cancer Care by Cooperative Activities of Cancer Centers with Practicing Physicians"—Henry Lemon, M.D., Omaha
- "Endoscopic Retrograde Cholangiopancreatography—Present Status"—Jack Vennes, M.D., Minneapolis
- "Immunologic Diagnosis of Cancer"—Karen Cost, Ph.D., Louisville
- Panel Discussion

THURSDAY, SEPTEMBER 29—Morning Session

- "What's New in Immunological Diseases"—Evelyn Hess, M.D., Cincinnati
- "Current Concepts Regarding Hydrocephalus"—William Meacham, M.D., Nashville
- "Office Management of Vulvar Disease"—Eduard Friedrich, Jr., M.D., Milwaukee
- "So, You've All Heard of Acanthosis Nigricans, But There Are Other Ways Internal Cancer Can Affect the Skin"—Peyton Weary, M.D., Charlottesville

THEME: "Alcoholism"

- "What Every Physician Should Know About Drinking Problems and Alcoholism"—Maxwell Weisman, M.D., Baltimore
- "New Developments in Alcoholics"—Arnold Ludwig, M.D., Lexington

Ten specialty groups will meet simultaneously at 1:30 p.m. No general session is scheduled.

Regulations Clarified For Radiologic Certification

In March, the Department for Human Resources adopted finalized regulations on standards for certification of radiologic equipment operators. Some members have expressed concern about the effect of these regulations and wonder just what they mean.

Essentially, the regulations require that every individual operating a source of radiation must register and make application for recertification with the Department for Human Resources. Prior to enactment of the regulations, recertification was not required, nor was certification of all operators.

On two occasions, these proposals were presented to the Interim Joint Subcommittee on Administrative Rules and Regulations of the State Legislature. KMA's views were represented each time, and information was also related to the KMA Board of Trustees at its April Board meeting by representatives of the DHR.

These provisions require that anyone who has not been certified by an approved credentialing organization must obtain a conditional operator's certificate up

to July 1, 1978, from the state. After July 1, conditional certificates will not be generally granted, and all operators must be certified or successfully pass an "appropriate DHR examination". The examination has not yet been given, nor developed, and hopefully, KMA will be allowed input into planning for the test. In addition, the Department for Human Resources has indicated that it will conduct a series of educational seminars across the state for individuals seeking certification.

Permanent certificates will be renewable every two years, and the regulations also require continuing education. For additional information, contact the KMA Headquarters.

Members Not Paying Assessment Notified of Delinquency

In September, 1975, the KMA House of Delegates levied a \$50 dues assessment on every active KMA member. At the 1976 KMA Annual Meeting, the House ruled that those members who did not pay the assessment would be dropped from membership. While numerous mailings and other efforts have been made to contact those still delinquent, it is possible that some members may not yet be aware, or have forgotten that they have not paid the assessment. While 2,606 members submitted their payment, 11 still have not paid.

In keeping with the policy established by the House of Delegates, those physicians who have not paid are: James E. Alvey, Jr., Louisville; Richard K. Bachman, Madisonville; George R. Bierly, Louisville; Roscoe C. Bryant, Louisville; Joan Hale, Louisville; Arthur T. Hall, Madisonville; C. Noel Hall, Versailles; Harold Kramer, Louisville; G. David McClure, Louisville; Diane McElheney, Ft. Mitchell; and Gehrig Mac Robinson, Louisville.

The Delegates and members of the Board of Trustees are hopeful that no physician loses his membership in Organized Medicine because of a lack of payment of the assessment. Your contacting anyone named above will be helpful in assuring that each physician is aware of his delinquent status, and if the assessment remains unpaid, will be dropped from membership as of September 15, 1977.

Annual Emergency Care Seminar Continues Successful Meetings

Over 350 physicians, nurses, emergency medical technicians, dentists, and other health professionals were in attendance at the Seventh Annual Emergency Medical Care Seminar held May 25-26 in Louisville.

As a result of the demand from last year, two afternoons were devoted to the presentation of the American Red Cross Basic Life Support Program where-

by participants would become certified in Cardiopulmonary Resuscitation upon successful completion of the practical training. Response to that segment of the program was again extremely favorable.

Outstanding presentations were made by the featured luncheon speakers, Gerald B. Shaftan, M.D., New York, and George R. Gay, M.D., Mendocino, California. The Military Assistance to Safety and Traffic (MAST) unit from Fort Campbell had a display which received considerable interest during the meeting.



Trustees' Report

FIFTH TRUSTEE DISTRICT Cecil L. Grumbles, M.D., Louisville

Great progress has been made by the Medical Foundation of Jefferson County Medical Society (JCMS) in acquiring the old Medical School Building from the state. Extensive studies are underway to determine the best use of this building now listed on the National Register of Historic Places. Potential uses include office space for our county medical society and other medically-oriented groups. Also, some public functions are now being considered. However, space would not be available for physician's offices. A fund-raising drive will be necessary to complete the acquisition and more details on this will be forthcoming.

At the annual meeting of the JCMS in May, Bob M. DeWeese, M.D., assumed the Presidency, and Sam D. Weakley, M.D., became President-Elect. Congratulations to both of these surgeons.

It is not too early to start plans for the KMA Annual Meeting in September. The JCMS delegates have met once and more meetings are scheduled. Delegates are urged to become informed—we cannot afford an "annual called special session", can we? The scientific portion again appears to have appeal to all segments of KMA.

SIXTH TRUSTEE DISTRICT Earl P. Oliver, M.D., Scottsville

The Sixth Trustee District will hold its annual dinner meeting at the Red Carpet Inn in Bowling Green on August 2, 1977. Letters containing more information will be forthcoming and will be followed by the usual reservation return postcard.

Bowling Green continues to look forward to the construction of a new City-County Hospital within the next year or so, and it appears now that an acceptable site may have been selected.

The Allen County War Memorial Hospital recently sponsored an intensive course in coronary care unit nursing which was taught by Martha Ann Garland, R.N., Phoenix.

Your trustee would like to remind members of the Sixth District that the KMA Leadership Conference will be held at the Hyatt Regency in Lexington on July 14.

Finally, the KMA Annual Meeting in September is only a few weeks away, and county societies or members wishing to present resolutions to the House of Delegates should be making preparations to do so.

FIFTEENTH TRUSTEE DISTRICT

Harold L. Bushey, M.D., Barboursville

The Fifteenth District meeting was held at Cumberland Falls State Park on May 4. Gordon Guthrie, M.D., from the University of Kentucky Medical Center, presented a lecture on hypertension in the afternoon. Following a social hour and dinner, James Holloway, M.D., Chairman, KMA Board of Trustees, discussed the work of KMA since the House of Delegates meeting in September, 1976. Questions and comments from the audience followed his presentation.

I was disappointed that Bell, Harlan, Clay, and Leslie counties were not represented at the meeting. This was unfortunate since all of our membership needs to be informed on KMA matters and to participate in exchange of ideas to strengthen our society.

My wife and I represented the Fifth Congressional District at the Washington Dinner on May 17. Prior to our visit to the Capitol, we had a briefing at the AMA office on current legislative efforts. We were able to talk with Tim Lee Carter, M.D., as well as other members of the Kentucky Congressional Delegation.

I hope all of our delegates will prepare for the Annual Meeting in September, and I look forward to seeing you at that meeting.

date. The Committee would like to remind the membership that there are over 23 million cases of hypertension in the United States and only 2.3 million cases are under adequate control. Extreme efforts should be made by the medical community to educate the public and screen for potential cases.

Health Care Cost Council

June 2

The first meeting of the KMA Health Care Cost Council was held at the KMA office with good representation from all sectors of the provider and consumer population. The Council worked on setting priorities and decided on issues to be covered in more detail at future meetings. It was the consensus of those attending that the Council might be beneficial in helping curb health care costs in Kentucky.



Did you know . . .

KMA staff presented written and oral testimony on Workmen's Compensation coverage of chiropractic services to a Subcommittee of the Interim Joint Legislative Committee on Industry and Labor in Frankfort.

So far in 1977, the AMA has made 49 official communications to Congressional committees and federal administrative agencies on behalf of the profession. These included formal testimony on 14 occasions and submission of formal statements on 14 occasions. Not counted in these numbers are the many individual Congressional contacts and federal agency communications made on a daily basis.



Members in the news

NEW MEMBERS

CAMPBELL-KENTON

Soon Ie Park, M.D. Ft. Thomas

FAYETTE

G. Richard Braen, M.D., Lexington
Stephen M. Bobys, M.D., Lexington
William L. Cooper, M.D., Lexington
John C. Sparrow, M.D., Lexington

FLOYD

Gangadhar L. Maddiwar, M.D., Martin

JEFFERSON

Nona D. Fulton, M.D., Louisville
Young K. Liu, M.D., Louisville
Nirmal S. Mann, M.D., Louisville
Carlos D. Rul-lan, M.D., Louisville
George W. Thomas, M.D., Louisville
Thomas R. Timbur, M.D., Louisville

Committee Activity

Committee on Community and Rural Health

April 15

The Committee in dealing with the increasing problems of alcoholism and drug abuse is looking into new approaches for educating the public. They hope to use the private physician and the news media to accomplish this awareness program.

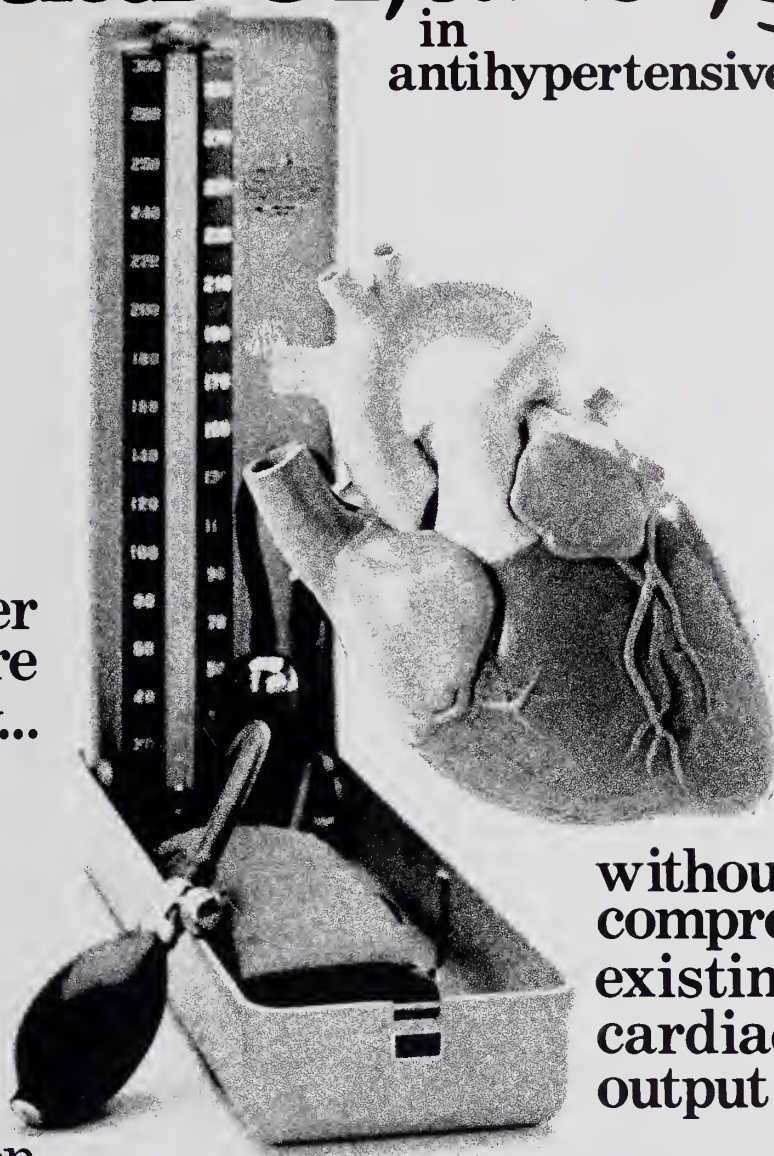
Representatives of the Admissions Committees from the University of Louisville and University of Kentucky explained the process by which a student is admitted to the state's two medical schools. Of concern to the Committee was the need for more students from rural areas. It was pointed out that 56% of the students coming from rural areas actually do return to that area to practice medicine. The applicant's family background, MCAP test scores, pre-medical school grades, and interviews with the Admissions Committee are taken into account. The medical schools accept 35% of those applying from rural areas and 39% from urban areas. Of Kentucky students applying to the state's medical schools, 47% will be accepted the first time they apply. One-half of those remaining will re-apply the next year with eventually 67-70% of all students applying being finally accepted.

The Committee also reviewed the final report on the Recreational Vehicle Accident Study and a Progress Report on the National Crash Severity Study which they had received from the University of Kentucky School of Engineering. Recommendations on these reports will be disseminated to the membership at a later

A Dual Challenge

in
antihypertensive therapy

to lower
blood pressure
effectively...



without
compromising
existing
cardiac
output

in hypertension

TABLETS: 250 mg, 500 mg, and 125 mg

ALDOMET[®] (METHYLDOPA | MSD)

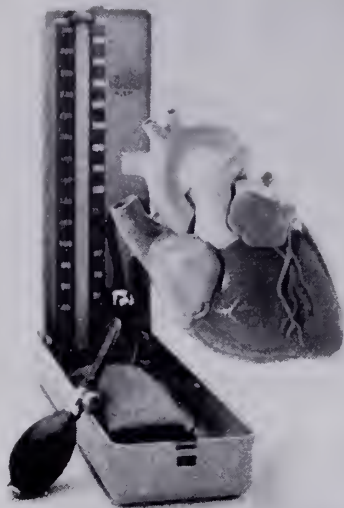
helps lower blood pressure effectively...

usually with no direct effect on
cardiac function—cardiac output
usually maintained

ALDOMET is contraindicated in active hepatic disease, hypersensitivity to the drug, and if previous methyldopa therapy has been associated with liver disorders. It is important to recognize that a positive Coombs test, hemolytic anemia, and liver disorders can occur with methyldopa therapy. The rare occurrences of hemolytic anemia or liver disorders could lead to potentially fatal complications unless properly recognized and managed. For more details see the brief summary of prescribing information.

For a brief summary of prescribing information, please see following page.

MSD
MERCK
SHARP
&
DOHME



in hypertension

ALDOMET[®]

(METHYLDOPA|MSD)

helps lower
blood pressure
effectively...
usually with no
direct effect on
cardiac function—
cardiac output is
usually maintained

Contraindications: Active hepatic disease, such as acute hepatitis and active cirrhosis; if previous methyldopa therapy has been associated with liver disorders (see Warnings); hypersensitivity.

Warnings: It is important to recognize that a positive Coombs test, hemolytic anemia, and liver disorders may occur with methyldopa therapy. The rare occurrences of hemolytic anemia or liver disorders could lead to potentially fatal complications unless properly recognized and managed. Read this section carefully to understand these reactions.

With prolonged methyldopa therapy, 10% to 20% of patients develop a positive direct Coombs test, usually between 6 and 12 months of therapy. Lowest incidence is at daily dosage of 1 g or less. This on rare occasions may be associated with hemolytic anemia, which could lead to potentially fatal complications. One cannot predict which patients with a positive direct Coombs test may develop hemolytic anemia. Prior existence or development of a positive direct Coombs test is not in itself a contraindication to use of methyldopa. If a positive Coombs test develops during methyldopa therapy, determine whether hemolytic anemia exists and whether the positive Coombs test may be a problem. For example, in addition to a positive direct Coombs test there is less often a positive indirect Coombs test which may interfere with cross matching of blood.

At the start of methyldopa therapy, it is desirable to do a blood count (hematocrit, hemoglobin, or red cell count) for a baseline or to establish whether there is anemia. Periodic blood counts should be done during therapy to detect hemolytic anemia. It may be useful to do a direct Coombs test before therapy and at 6 and 12 months after the start of therapy. If Coombs-positive hemolytic anemia occurs, the cause may be methyldopa and the drug should be discontinued. Usually the anemia remits promptly. If not, corticosteroids may be given and other causes of anemia should be considered. If the hemolytic anemia is related to methyldopa, the drug should not be reinstituted. When methyldopa causes Coombs positivity alone or with hemolytic anemia, the red cell is usually coated with gamma globulin of the IgG (gamma G) class only. The positive Coombs test may not revert to normal until weeks to months after methyldopa is stopped.

Should the need for transfusion arise in a patient receiving methyldopa, both a direct and an indirect Coombs test should be performed on his blood. In the absence of hemolytic anemia, usually only the direct Coombs test will be positive. A positive direct Coombs test alone will not interfere with typing or

cross matching. If the indirect Coombs test is also positive, problems may arise in the major cross match and the assistance of a hematologist or transfusion expert will be needed.

Fever has occurred within first 3 weeks of therapy, sometimes with eosinophilia or abnormalities in liver function tests, such as serum alkaline phosphatase, serum transaminases (SGOT, SGPT), bilirubin, cephalin cholesterol flocculation, prothrombin time, and bromsulphalein retention. Jaundice, with or without fever, may occur, with onset usually in the first 2 to 3 months of therapy. In some patients the findings are consistent with those of cholestasis. Rarely fatal hepatic necrosis has been reported. These hepatic changes may represent hypersensitivity reactions; periodic determination of hepatic function should be done particularly during the first 6 to 12 weeks of therapy or whenever an unexplained fever occurs. If fever and abnormalities in liver function tests or jaundice appear, stop therapy with methyldopa. If caused by methyldopa, the temperature and abnormalities in liver function characteristically have reverted to normal when the drug was discontinued. Methyldopa should not be reinstituted in such patients.

Rarely, a reversible reduction of the white blood cell count with primary effect on granulocytes has been seen. Reversible thrombocytopenia has occurred rarely. When used with other antihypertensive drugs, potentiation of antihypertensive effect may occur. Patients should be followed carefully to detect side reactions or unusual manifestations of drug idiosyncrasy.

Use in Pregnancy: Use of any drug in women who are or may become pregnant requires that anticipated benefits be weighed against possible risks; possibility of fetal injury can not be excluded.

Precautions: Should be used with caution in patients with history of previous liver disease or dysfunction (see Warnings). May interfere with measurement of: uric acid by the phosphotungstate method, creatinine by the alkaline picrate method, and SGOT by colorimetric methods. Since methyldopa causes fluorescence in urine samples at the same wavelengths as catecholamines, falsely high levels of urinary catecholamines may be reported. This will interfere with the diagnosis of pheochromocytoma. It is important to recognize this phenomenon before a patient with a possible pheochromocytoma is subjected to surgery. Methyldopa is not recommended for patients with pheochromocytoma. Urine exposed to air after voiding may darken because of breakdown of methyldopa or its metabolites.

Stop drug if involuntary choreoathetotic movements occur in patients with severe bilateral cerebrotar disease. Patients may require reduced doses of anesthetics; hypotension occurring during anesthesia usually can be controlled with vasopressors. Hypertension has recurred after dialysis in patients on methyldopa because the drug is removed by procedure.

Adverse Reactions: *Central nervous system:* Sedation, headache, asthenia or weakness, usually early and transient; dizziness, lightheadedness, symptoms of cerebrovascular insufficiency, paresthesias, parkinsonism, Bell's palsy, decreased mental acuity, involuntary choreoathetotic movements; psychic disturbances, including nightmares and reversible mild psychoses or depression.

Cardiovascular: Bradycardia, aggravation of angina pectoris. Orthostatic hypotension (decrease in blood pressure on standing). Edema (and weight gain) usually results from use of a diuretic. (Discontinue methyldopa if edema progresses or signs of heart failure appear.)

Gastrointestinal: Nausea, vomiting, distention, flatulence, diarrhea, mild dryness of mouth or "black" tongue, pancreatitis, sialadenitis.

Hepatic: Abnormal liver function tests, jaundice, liver disorders.

Hematologic: Positive Coombs test, hemolytic anemia. Leukopenia, granulocytopenia, thrombocytopenia.

Allergic: Drug-related fever, myocarditis.

Other: Nasal stuffiness, rise in BUN, breast enlargement, gynecomastia, lactation, impotence, decreased libido, dermatologic reactions including eczema, lichenoid eruptions, mild arthralgia, myalgia.

Note: Initial adult dosage should be limited to 500 mg daily when given with antihypertensive other than thiazides. Tolerance may occur, usually between second and third month of therapy. Increased dosage or adding a thiazide frequently restores effective control. Patients with impaired renal function may respond to smaller doses. In older patients may be related to increased sensitivity and advanced arteriosclerotic vascular disease; this may be avoided by lower dosages.

How Supplied: Tablets, containing 100 mg methyldopa each, in bottles of 100; Tablets, containing 250 mg methyldopa each, in single-unit packages of 100 and bottles of 100 and 500 mg methyldopa each, in single-unit packages of 100 and bottles of 100.

For more detailed information, consult your representative or see full prescribing information. Merck Sharp & Dohme, Division of Merck & Co., Inc., West Point, Pa. 19486

J6460

MSD MERCK SHARP & DOHME



Headquarters Activity

KMA had physicians and staff members in attendance at the following activities and events:

JUNE

- 2 Health Care Cost Council, Louisville
- 9 Constitution and Bylaws Committee, Louisville
- 13 *Journal* Editors, Louisville
- 15 Technical Advisory Council to Medical Assistance (Medicaid), Frankfort
- McDowell House Board of Managers, Danville
- 14-16 Board of Licensure (FLEX) Exams, Louisville
- 16-17 AAMSE Negotiation Workshop, Lake Tahoe
- 18-23 AMA Annual Meeting, San Francisco
- 24 HSA West Executive Board, Louisville
- 29 Judicial Council, Louisville

JULY

- 11 *Journal* Editors, Louisville
- 13 Board of Trustees, Lexington
- 14 KMA Leadership Conference, Lexington
- 28 Board of Medical Licensure, Louisville

Letters to the Editor

Dear Editor:

I am enclosing a copy of several pages of the preface of the current Robert Wood Johnson Foundation, *Annual Report 76*.

In contradistinction to our often overly negative and pessimistic outlook, Doctor Rogers has come up with some striking benchmarks of improvement in respect to medical care and the health of the American people.

Not knowing whether this report had come to your attention by other means, I felt impelled to put a copy of these few remarkable pages into your hands. (See page 330)

Frank R. Lemon, M.D.

**Director of Continuing Medical Education
University of Kentucky Medical Center
Lexington, Kentucky**

Dear Editor:

This letter is in regard to the observations and clarifications by Robert McKenney, M.D., and President Paul Parks regarding the KMA House of Delegates special meeting on February 10, 1977.

Some thoughts I had after reading these two very interesting letters: first, it is apparently clear to both correspondents that this is a program which requires endorsement by the Kentucky Medical Association House of Delegates; second, the usual removal of money from the top takes place in Washington before it is

distributed back for distribution to physicians, the round trip to Washington returning a depreciated volume; third, the usual, reasonable and customary fee concept is a means of limiting and controlling fees; fourth, in as much as this has been a problem for ten years since Medicare, the problem rises because of the acceptance of assignments determined by the third party insurance intermediaries. It is quite proper under the law to not accept assignments.

In the event of national health insurance, the hospital and physician insurance intermediary is under contract to determine fee reimbursement for the physicians. By not accepting assignment as the law permits, physicians in contract with their patients determine their own fees, which permits both parties to the contract better control.

**John B. Floyd, Jr., M.D.
119 East Maxwell Street
Lexington, Kentucky**

In Memoriam

**ABRAHAM W. KRUPP, M.D.
Louisville
1899-1977**

Abraham W. Krupp, M.D., died on June 1 at the age of 78. A general practitioner, Doctor Krupp was a native of Russia and graduated from the University of Louisville in 1930. He belonged to the Jefferson County Medical Society and the Kentucky and American medical associations.

**WINSTON U. RUTLEDGE, M.D.
Louisville
1898-1977**

Winston Underwood Rutledge, M.D., 79, died on June 14. A dermatologist and 1924 graduate of the University of Virginia Medical School, Doctor Rutledge was a medical consultant at Fort Knox and a member of the American Academy of Dermatology. He was an emeritus member of the American and Kentucky medical associations.

* * * * *

LATEST NEWS

Hoyt D. Gardner, M.D., Louisville, was re-elected to the Board of Trustees of the American Medical Association at its Annual Meeting, June 18-23 in San Francisco.

BOOK REVIEW

Thomas Hunt Morgan: Pioneer of Genetics, By Shine, Ian and Wrobel, Sylvia, Lexington, University of Kentucky Press, 1976, 156 pp., \$3.95.

This compressed biography of an expanded life carries many valuable and constructive lessons for today's reader. In 1933 Thomas Hunt Morgan (1866-1945) became the first Kentuckian to earn a Nobel prize and the first Nobel recipient in the field of genetics. Morgan's high sense of honesty, his consistently disarming boyish humor, his informality, and yet his perspicacity in experimental biology drew great strength from homey roots in Kentucky. The flavor of a **good** family environment in Lexington plus the academic turbulence of the emerging State College of Kentucky (later the University of Kentucky) are captured clearly through the research and the words of the authors. The world of the first chromosomes and later the genes of the fruit fly, *Drosophila*, became benchmarks in every college biology course after the first years of this century. *Drosophila* and the "fly room" at Columbia University likewise were the substrate leading to the majority of Morgan's 22 books and approximately 370 papers. Provincially confused with the lightning raider, his uncle, John Hunt Morgan, thunderbolt of the Confederacy, Thomas Hunt Morgan stood aside from the intense family entanglement in the heroics and the horrors of the War between the States. He dated 1866 not in the terms of that war, but rather in reference to Fr. Mendel's announcement of his discoveries in cross-breeding of the sweet peas—and in passing, to his own birth.

His work of experimental biology and genetics and later his devotion to his four youngsters permeated every aspect of his waking hours and even led to his requested year's delay in sailing to Stockholm to receive the Nobel prize. His laboratory drew first attention. His children, like most of the young scientists that passed through his laboratories, became substantial leaders and generally perpetuated the informality, the banter, and the give and take of aspiring equals seeking to unravel the unknowns of heredity. From these efforts came the now familiar words such as translocation, disjunction, nondisjunction, crossing over, linkage, interference, and inversion. He often thought of himself as an embryologist and labored for years in non-characteristic editing and reediting to produce the magnificent volume, *Experimental Embryology* (1927, Columbia University Press), which essentially fell stillborn from the presses. This was in sharp contrast to nearly all of his other writings on heredity, genetics, and evolution. He was such a recognized scholar in genetics that even his mistakes were accepted by his readers; his expositions as an embryologist were rejected even when they were right. His ingredients for success were identified as luck, a favorable experimental model, skepticism, and

industry. These were aided by his total lack of pomp, rapid ability to reject what was false, and the capacity which allowed him to make dreadful errors, then correct them and return to the forefront of thinking. Perhaps this flexibility was born of Kentucky wounds in the time of his infancy when brothers did leave brothers and dealt with "dreadful errors."

The freedom of receiving the first named and endowed American Chair in Experimental Zoology (Columbia University, 1903) at the age of 36 in no way dulled his always skeptical state of mind toward scientific hypotheses—especially his own.

Every Kentuckian truly interested in higher education and with a tinge of pride in this soil will have sharpened understanding of science and accomplishing warmth for people after a few hours invested in these pages.

Arthur H. Keeney, M.D., D.Sc.
Dean of the School of Medicine
University of Louisville
Professor of Ophthalmology

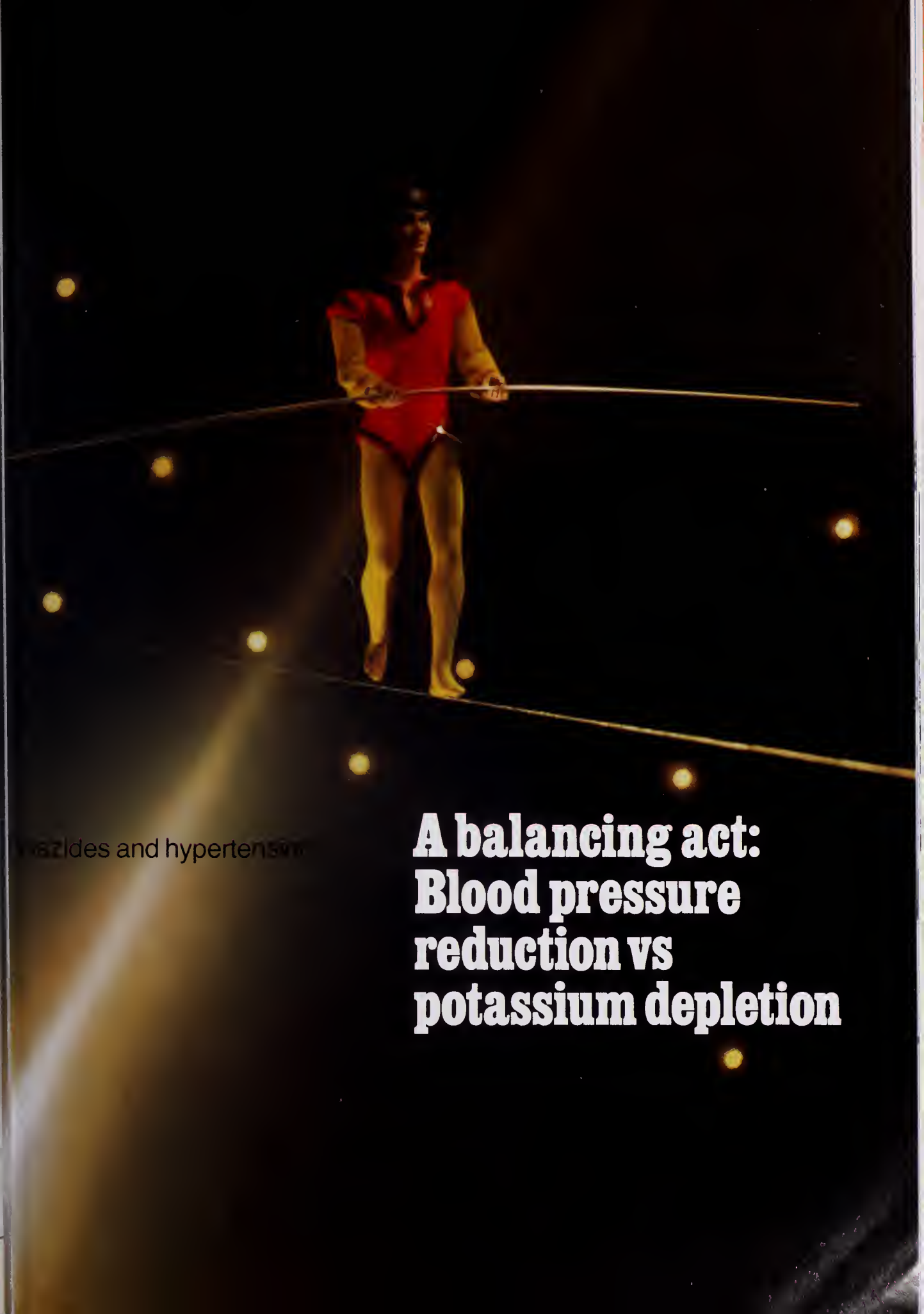
Maternal Mortality

(Continued from page 331)

from the lack of available information. Blood studies and cultures of urine or other media would have been invaluable in the treatment of this case and its retrospective evaluation. If post mortem examination cannot be obtained, these studies and certain x-ray examinations may provide the necessary information to determine the cause of death. Serum can be obtained and frozen so that it can possibly be used at a later date for the measurement of factors which were inadvertently omitted or forgotten. For example, the sepsis which this patient demonstrated could have caused adrenal failure and a cortisol determination from the serum obtained post mortem could have possibly led to the diagnosis. Therefore, failure to obtain a permission for autopsy does not prevent the physician from gathering information which may have led to the cause of death and hopefully preventing its recurrence.

EMERGENCY PHYSICIAN WANTED

Louisville, Ky. — **St. Joseph Infirmary Emergency Department.** Accepting applications for 4th member of group. 25,000 annual patient volume, excellent nursing staff. Minimum guarantee/fee-for-service compensation. *Contact T. P. Cooper, M.D. 1-800-325-3982 for details.*



Mazides and hypertensive

**A balancing act:
Blood pressure
reduction vs
potassium depletion**

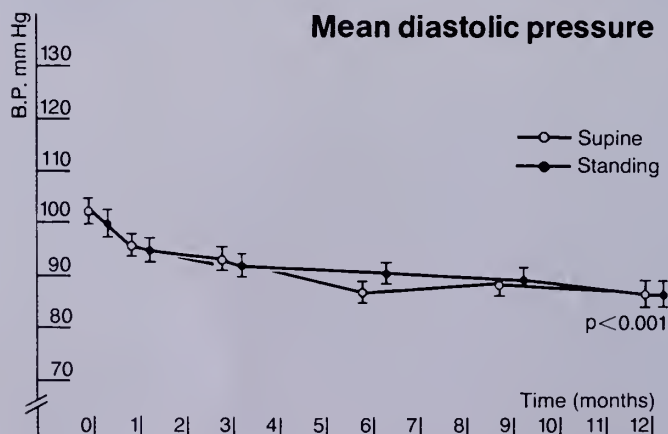
From a 1-year study of 18 patients
with mild uncomplicated
hypertension published in The Lancet*

Once a day

Naturetin®

Bendro-
flumethiazide
Tablets N.F.

Diastolic blood pressure down 12-15%



"The mean pretreatment blood pressure was 170/103 mmHg (supine) and 166/100 mmHg (standing). Diastolic pressure continued to fall over the first 6 months and then there was no further change up to 1 year...The mean blood pressure at 12 months was 153/88 mmHg (supine) and 142/88 mmHg (standing)."

"The patients were receiving a single daily dose of 10 mg bendrofluazide [bendroflumethiazide]...there were no apparent side effects from the medication."

*Wilkinson PR et al: The Lancet 1:759-762, 1975.



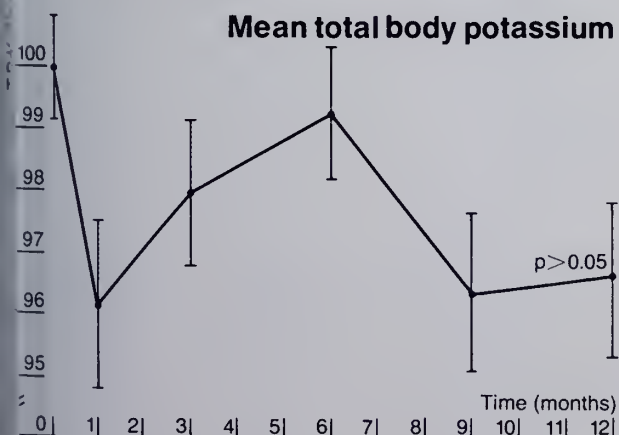
Once a day

Naturetin®

Bendro-
flumethiazide
Tablets N.F.

2.5, 5 and 10 mg

Potassium stabilized at 96% mean TBK



"The amount of potassium loss during the period of study did not seem to be clinically significant."

"A serum potassium of less than 3.5mmol per litre is often taken as the value below which potassium supplements should be given...At an arbitrary lower value for serum potassium of 3.0mmol per litre, few patients, our data suggest, would need potassium supplements. Our findings with TBK support this view..."

See next page for full prescribing information.

Once a day **Naturetin®** **Bendroflumethiazide** **Tablets N.F.**

NATURETIN®-2.5

NATURETIN®-5

NATURETIN®-10

Bendroflumethiazide Tablets N.F.

DESCRIPTION

Naturetin (Bendroflumethiazide Tablets N.F.) is a benzothiadiazine derivative containing a benzyl and a trifluoromethyl group. It is a potent oral diuretic and antihypertensive agent available as compressed tablets providing 2.5, 5.0, or 10 mg. bendroflumethiazide.

ACTIONS

The mechanism of action results in an interference with the renal tubular mechanism of electrolyte reabsorption. At maximal therapeutic dosage all thiazides are approximately equal in their diuretic potency. The mechanism whereby thiazides function in the control of hypertension is unknown.

INDICATIONS

Naturetin (Bendroflumethiazide Tablets N.F.) is indicated as adjunctive therapy in edema associated with congestive heart failure, hepatic cirrhosis and corticosteroid and estrogen therapy.

Bendroflumethiazide has also been found useful in edema due to various forms of renal dysfunction such as: nephrotic syndrome, acute glomerulonephritis, and chronic renal failure.

Naturetin (Bendroflumethiazide Tablets N.F.) is indicated in the management of hypertension either as the sole therapeutic agent or to enhance the effectiveness of other antihypertensive drugs in the more severe forms of hypertension.

Usage in Pregnancy. The routine use of diuretics in an otherwise healthy woman is inappropriate and exposes mother and fetus to unnecessary hazard. Diuretics do not prevent development of toxemia of pregnancy, and there is no satisfactory evidence that they are useful in the treatment of developed toxemia.

Edema during pregnancy may arise from pathological causes or from the physiologic and mechanical consequences of pregnancy. Thiazides are indicated in pregnancy when edema is due to pathologic causes, just as they are in the absence of pregnancy (see WARNINGS). Dependent edema in pregnancy, resulting from restriction of venous return by the expanded uterus, is properly treated through elevation of the lower extremities and use of support hose; use of diuretics to lower intravascular volume in this case is illogical and unnecessary. There is hypervolemia during normal pregnancy which is harmful to neither the fetus nor the mother (in the absence of cardiovascular disease), but which is associated with edema, including generalized edema, in the majority of pregnant women. If this edema produces discomfort, increased recumbency will often provide relief. In rare instances, this edema may cause extreme discomfort which is not relieved by rest. In these cases, a short course of diuretics may provide relief and may be appropriate.

CONTRAINDICATIONS

Bendroflumethiazide is contraindicated in anuria.

It is also contraindicated in patients who have previously demonstrated hypersensitivity to it or other sulfonamide-derived drugs.

WARNINGS

Bendroflumethiazide should be used with caution in severe renal disease. In patients with renal disease, thiazides may precipitate azotemia. Cumulative effects of the drug may develop in patients with impaired renal function.

Thiazides should be used with caution in patients with impaired hepatic function or progressive liver disease, since minor alterations of fluid and electrolyte balance may precipitate hepatic coma.

Thiazides may be additive or may potentiate the action of other antihypertensive drugs. Potentiation occurs with ganglionic or peripheral adrenergic blocking drugs.

Sensitivity reactions may occur in patients with a history of allergy or bronchial asthma.

The possibility of exacerbation or activation of systemic lupus erythematosus has been reported.

Usage in Pregnancy. Thiazides cross the placental barrier and appear in cord blood. The use of thiazides in pregnant women requires that the anticipated benefit be weighed against possible hazards to the fetus. These hazards include fetal or neonatal jaundice, thrombocytopenia, and possibly other adverse reactions which have occurred in the adult.

Nursing Mothers. Thiazides appear in breast milk. If use of the drug is deemed essential, the patient should stop nursing.

PRECAUTIONS

Periodic determination of serum electrolytes to detect possible electrolyte imbalance should be performed at appropriate intervals.

All patients receiving thiazide therapy should be observed for clinical signs of fluid or electrolyte imbalance; namely, hyponatremia, hypochloremic alkalosis, and hypokalemia. Serum and urine electrolyte determinations are particularly important when the patient is vomiting excessively or receiving parenteral fluids. Medication such as digitalis may also influence serum electrolytes. Warning signs, irrespective of cause, are: dryness of the mouth, thirst, weakness, lethargy, drowsiness, restlessness, muscle pains or cramps, muscular fatigue, hypotension, oliguria, tachycardia, and gastrointestinal disturbances such as nausea and vomiting.

Hypokalemia may develop with thiazides as with any other potent diuretic, especially with brisk diuresis, when severe cirrhosis is present, or during concomitant use of corticosteroids or ACTH.

Interference with adequate oral electrolyte intake will also contribute to hypokalemia. Digitalis therapy may exaggerate metabolic effects of hypokalemia especially with reference to myocardial activity.

Any chloride deficit is generally mild and usually does not require specific treatment except under extraordinary circumstances (as in liver disease or renal disease). Dilutional hyponatremia may occur in edematous patients in hot weather; appropriate therapy is water restriction, rather than administration of salt except in rare instances when the hyponatremia is life threatening. In actual salt depletion, appropriate replacement is the therapy of choice.

Hyperuricemia may occur or frank gout may be precipitated in certain patients receiving thiazide therapy.

Insulin requirements in diabetic patients may be increased, decreased, or unchanged. Latent diabetes mellitus may become manifest during thiazide administration.

Thiazide drugs may increase the responsiveness to tubocurarine.

The antihypertensive effects of the drug may be enhanced in the postsympathectomy patient.

Thiazides may decrease arterial responsiveness to norepinephrine. This diminution is not sufficient to preclude effectiveness of the pressor agent for therapeutic use. If emergency surgery is indicated, preanesthetic and anesthetic agents should be administered in reduced dosage.

If progressive renal impairment becomes evident, as indicated by a rising nonprotein nitrogen or blood urea nitrogen, a careful reappraisal of therapy is necessary with consideration given to withholding or discontinuing diuretic therapy.

Thiazides may decrease serum PBI levels without signs of thyroid disturbance.

ADVERSE REACTIONS

Gastrointestinal System: anorexia, gastric irritation, nausea, vomiting, cramping, diarrhea, constipation, jaundice (intrahepatic cholestatic jaundice), and pancreatitis.

Central Nervous System: dizziness, vertigo, paresthesia, headache, and xanthopsia.

Hematologic: leukopenia, agranulocytosis, thrombocytopenia, and aplastic anemia.

Dermatologic-Hypersensitivity: purpura, photosensitivity, rash, urticaria, and necrotizing angitis (vasculitis, cutaneous vasculitis).

Cardiovascular: orthostatic hypotension may occur and may be aggravated by alcohol, barbiturates or narcotics. **Other:** hyperglycemia, glycosuria, occasional metabolic acidosis in diabetic patients, hyperuricemia, allergic glomerulonephritis, muscle spasm, weakness, and restlessness.

Whenever adverse reactions are moderate or severe, thiazide dosage should be reduced or therapy withdrawn.

DOSAGE AND ADMINISTRATION

Therapy should be individualized according to patient response. This therapy should be titrated to gain maximal therapeutic response as well as the minimal dose possible to maintain that therapeutic response.

Diuretic: The usual dose is 5 mg. once daily, preferably given in the morning. To initiate therapy, doses up to 20 mg. may be given once daily or divided into two doses. A single daily dose of 2.5 to 5 mg. should suffice for maintenance.

Alternatively, intermittent therapy may be advantageous in many patients. By administering the preparation every other day or on a three to five day per week schedule, electrolyte imbalance is less likely to occur; however, the possibility still exists.

In general, the lowest dosage that achieves the therapeutic response should be employed.

Antihypertensive: The suggested initial dosage is 5 to 20 mg. daily. Maintenance dosage may range from 2.5 to 15 mg. per day, depending on the individual response of the patient. When the diuretic is used with other antihypertensive agents, lower maintenance doses for each drug are usually sufficient.

STORAGE

Store at room temperature; avoid excessive heat.

HOW SUPPLIED

2.5 mg. tablets in bottles of 100, 5 mg. tablets (scored) in bottles of 100 and 1000, and 10 mg. tablets (scored) in bottles of 100.

SQUIBB®

ROCHE

For recurrent attacks of urinary tract infection in women

Bactrim™ DS Double Strength Tablets

Each tablet contains 160 mg trimethoprim and 800 mg sulfamethoxazole.

Just one tablet b.i.d. for 10 to 14 days



Action at urinary/vaginal/lower bowel sites helps eliminate reservoirs of infecting organisms

Distinctive antibacterial action plus wide spectrum helps eradicate recurrent UTI

Low incidence of bacterial resistance in community practice

- Convenient *b.i.d.* dosage provides day-and-night antibacterial control
- Contraindicated during pregnancy and the nursing period. During therapy, maintain adequate fluid intake; perform CBC's and urinalyses with microscopic examination.

Before prescribing, please consult complete product information, a summary of which follows:

Indications and Usage: For the treatment of urinary tract infections due to susceptible strains of the following organisms: *Escherichia coli*, *Klebsiella-Enterobacter*, *Proteus mirabilis*, *Proteus vulgaris*, *Proteus morganii*. It is recommended for initial episodes of uncomplicated urinary tract infections treated with a single effective antibacterial agent rather than the combination. Note: The increasing frequency of resistant organisms limits the usefulness of all antibacterials, especially in these urinary tract infections.

Also for the treatment of documented *Pneumocystis carinii* pneumonitis. To date, this drug has been tested only in patients 9 months to 16 years of age who were immunosuppressed by cancer therapy.

The recommended quantitative disc susceptibility method (Federal Register, 37:20527-20529, 1972) may be used to estimate bacterial susceptibility to Bactrim. A laboratory report of "susceptible to trimethoprim-sulfamethoxazole" indicates an infection likely to respond to Bactrim therapy. If infection is confined to the urine, "Intermediate susceptibility" also indicates a likely response. "Resistant" indicates that response is unlikely.

Contraindications: Hypersensitivity to trimethoprim or sulfonamides; pregnancy; nursing mothers; infants less than two months of age.

Warnings: Deaths from hypersensitivity reactions, agranulocytosis, aplastic anemia and other blood dyscrasias have been associated with sulfonamides. Experience with trimethoprim is much more limited but occasional interference with hematopoiesis has been reported as well as an increased incidence of thrombocytopenia with purpura in elderly patients on certain diuretics, primarily thiazides. Sore throat, fever, pallor, purpura or jaundice may be early signs of serious blood disorders. Frequent CBC's are recommended; therapy should be discontinued if a significantly reduced count of any formed blood element is noted.

Precautions: Use cautiously in patients with impaired renal or hepatic function, possible folate deficiency, severe allergy or bronchial asthma. In patients with glucose-6-phosphate dehydrogenase deficiency, hemolysis, frequently dose-related, may occur. During therapy, maintain adequate fluid intake and perform frequent urinalyses, with careful microscopic examination, and renal function tests, particularly where there is impaired renal function.

Adverse Reactions: All major reactions to sulfonamides and trimethoprim are included, even if not reported with Bactrim. **Blood dyscrasias:** Agranulocytosis, aplastic anemia, megaloblastic anemia, thrombopenia, leukopenia, hemolytic anemia, purpura, hypoprothrombinemia and methemoglobinemia. **Allergic reactions:** Erythema multiforme, Stevens-Johnson syndrome, generalized skin eruptions, epidermal necrolysis, urticaria, serum sickness, pruritus, exfoliative dermatitis, anaphylactoid reactions, periorbital edema, conjunctival and scleral injection, photosensitivity, arthralgia and allergic myocarditis. **Gastrointestinal reactions:** Glossitis, stomatitis, nausea, emesis, abdominal pains, colitis, diarrhea and pancreatitis. **CNS reactions:** Headache,

peripheral neuritis, mental depression, convulsions, ataxia, hallucinations, tinnitus, vertigo, insomnia, apathy, fatigue, muscle weakness and nervousness. **Miscellaneous reactions:** Drug fever, chills, toxic nephrosis with oliguria and anuria, periarteritis nodosa and L. E. phenomenon. Due to certain chemical similarities to some goitrogens, diuretics (acetazolamide, thiazides) and oral hypoglycemic agents, sulfonamides have caused rare instances of goiter production, diuresis and hypoglycemia in patients; cross-sensitivity with these agents may exist. In rats, long-term therapy with sulfonamides has produced thyroid malignancies.

Dosage: Not recommended for infants less than two months of age.

Urinary Tract Infections: Usual adult dosage—1 DS tablet (double strength), 2 tablets (single strength) or 4 teasp. (20 ml) b.i.d. for 10-14 days.

Recommended dosage for children—8 mg/kg trimethoprim and 40 mg/kg sulfamethoxazole per 24 hours, in two divided doses for 10 days. A guide follows:

Children two months of age or older:

| Weight | | Dose—every 12 hours | |
|--------|-----|---------------------|--------------------------|
| lbs | kgs | Teaspoonfuls | Tablets |
| 20 | 9 | 1 teasp. (5 ml) | ½ tablet |
| 40 | 18 | 2 teasp. (10 ml) | 1 tablet |
| 60 | 27 | 3 teasp. (15 ml) | 1½ tablets |
| 80 | 36 | 4 teasp. (20 ml) | 2 tablets or 1 DS tablet |

For patients with renal impairment:

| Creatinine Clearance (ml/min) | Recommended Dosage Regimen |
|-------------------------------|----------------------------|
| Above 30 | Usual standard regimen |
| 15-30 | ½ the usual regimen |
| Below 15 | Use not recommended |

***Pneumocystis carinii* pneumonitis:** Recommended dosage: 20 mg/kg trimethoprim and 100 mg/kg sulfamethoxazole per 24 hours in equal doses every 6 hours for 14 days. See complete product information for suggested children's dosage table.

Supplied: Double Strength (DS) tablets, each containing 160 mg trimethoprim and 800 mg sulfamethoxazole, bottles of 100; Tel-E-Dose® packages of 100. Tablets, each containing 80 mg trimethoprim and 400 mg sulfamethoxazole—bottles of 100 and 500; Tel-E-Dose® packages of 100; Prescription Paks of 40, available singly and in trays of 10. Oral suspension, containing in each teaspoonful (5 ml) the equivalent of 40 mg trimethoprim and 200 mg sulfamethoxazole, fruit-licorice flavored—bottles of 16 oz (1 pint).

ROCHE Roche Laboratories
Division of Hoffmann-La Roche Inc.
Nutley, New Jersey 07110

Please see back cover.

Her next attack of cystitis may require

the Bactrim™ 3-system counterattack



ROCHE

Bactrim has shown high clinical effectiveness in recurrent cystitis as a result of its wide spectrum and distinctive antimicrobial action in the urinary, vaginal and lower intestinal tracts.

The probability of recurrent urinary tract infection appears to be enhanced by the establishment of large numbers of *E. coli* or other urinary pathogens on the vaginal introitus. The trimethoprim component of

Bactrim diffuses into vaginal fluid in effective concentrations, thus combating migration of pathogens into the urethra.

Studies have shown that Bactrim acts against *Enterobacteriaceae* in the bowel without the emergence of resistant organisms. Thus, Bactrim reduces the risk of introcolonization by fecal uropathogens. It has *no* significant effect on other normal, necessary intestinal flora.

Bactrim fights uropathogens in the urinary tract/vaginal tract/lower intestinal tract

Please see reverse side for summary of product information.

August 1977
Volume 75
Number 8

KMA Annual Meeting Issue
September 26-29
Bluegrass Convention Center, Louisville

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MDS

The Journal Of The Kentucky Medical Association

A character all its own.



Valium (diazepam) is a benzodiazepine with a character all its own.

Pharmacologically, it has been described as more potent mg-per-mg than other available anxiolytic benzodiazepines. Pharmacokinetically, only Valium provides active *diazepam* as well as the active metabolites 3-hydroxydiazepam, desmethyldiazepam and oxazepam.

But the individual character of Valium is even more apparent clinically than pharmacokinetically. And far more significant. That's because of the patient response obtained with Valium. A response which brings a calmer frame of mind. A response which has a pronounced effect on the somatic symptoms of anxiety, particularly muscular tension. A response which helps the patient feel more like himself again because of the way Valium reduces the overwhelming symptoms of anxiety and psychic tension.

Another important aspect of the clinical character of Valium is safety. Though drowsiness, ataxia and fatigue are possible, these and more serious side effects are rarely a problem. Of course, as with all CNS-acting drugs, patients taking Valium should be cautioned against driving, operating dangerous machinery or the simultaneous ingestion of alcohol.

Unquestionably, many psychotherapeutic agents, including other benzodiazepines, have antianxiety effects. But one fact remains: you get a certain kind of patient response with Valium. It's a response you want. A response you know. A response you trust as part of your overall management of anxiety and psychic tension.

Valium[®] (diazepam)^{IV}

2-mg, 5-mg, 10-mg scored tablets
a prudent choice in psychic
tension and anxiety

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Tension and anxiety states; somatic complaints which are concomitants of emotional factors; psychoneurotic states manifested by tension, anxiety, apprehension, fatigue, depressive symptoms or agitation; symptomatic relief of acute agitation, tremor, delirium tremens and hallucinosis due to acute alcohol withdrawal; adjunctively in skeletal muscle spasm due to reflex spasm to local pathology; spasticity caused by upper motor neuron disorders; athetosis; stiff-man syndrome; convulsive disorders (not for sole therapy).

Contraindicated: Known hypersensitivity to the drug. Children under 6 months of age. Acute narrow angle glaucoma; may be used in patients with open angle glaucoma who are receiving appropriate therapy.

Warnings: Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anticonvulsant medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms (similar to those with barbiturates and alcohol) have occurred following abrupt discontinuance (convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). Keep addiction-prone individuals under careful surveillance because of their predisposition to habituation and dependence.

Usage in Pregnancy: Use of minor tranquilizers during first trimester should almost always be avoided because of increased risk of congenital malformations as suggested in several studies. Consider possibility of pregnancy when instituting therapy; advise patients to discuss therapy if they intend to or do become pregnant.

Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed; drugs such as phenothiazines, narcotics, barbiturates, MAO inhibitors and other antidepressants may potentiate its action. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.

Side Effects: Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.



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The Journal Of The Kentucky Medical Association

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MESSAGE FROM THE PRESIDENT



Positive Approach

The numerous problems confronting physicians in Kentucky today, and indeed in America at times, seems so overwhelming and our ability to cope with them seems so slight that one tends to adopt a pessimistic approach. However, such pessimism is not justified.

I would like to take this opportunity, after being Chairman of the Board for nearly a year, to point out some of the positive things about KMA and physicians in Kentucky. At the present time, KMA has 3,039 members, one of our highest membership levels. The 1976 Annual Meeting set a record in registration with 2,337 in attendance. Our Auxiliary increases its activity yearly, and we are proud that Mrs. Rose Gardner was elected AMA Auxiliary First Vice President, which means that she will have national input and influence for the Commonwealth.

The KMA staff now consists of 23 dedicated people—all of whom work hours quite comparable to your own. All of this effort is being directed toward the betterment of KMA and making the physician's life in this complex world tolerable. Association assets have never been better; we are worth about a million and a half dollars with our building and cash assets. Thanks to the astute planning of Doctor Ballard Cassady and staff, our budget is in good shape for the next five years.

KMA officers are highly qualified and dedicated physicians. Doctor Paul Parks has done a tremendous job this year, beginning to gracefully bring the disparate wings of our Association together. He will be succeeded in September by Doctor John Stewart, who has wide experience working on behalf of physicians. With continued leadership and interest in the organization by Kentucky physicians, KMA can look forward to increased unity and progress in the coming years.

Having attended my first AMA meeting and having had the opportunity to observe our AMA delegates and alternates, I can tell you that the Kentucky delegation is well thought of. They go well prepared and have considerable influence on the national level. Doctor Hoyt Gardner was recently re-elected on the first ballot to a second term on the AMA Board of Trustees. This is a great tribute to his diligence and work and it is apparent that he is highly regarded at the AMA level. Kentucky is indeed fortunate to have him serve in this position.

For the above reasons, we can close out the Associational year on a note of optimism. I know we can meet the problems facing us with unity and ability.

Finally, I would like to publicly express my gratitude to the Board of Trustees for their attentiveness and splendid cooperation during the past year. This has enabled the meetings to run smoothly and expeditiously, and we have been able to cover an enormous amount of ground.

JAMES B. HOLLOWAY, JR., M.D.

CHAIRMAN, KMA BOARD OF TRUSTEES

This is the fourth in a series of articles written at the request of KMA President Paul J. Parks, M.D.

A Link in the Chain

u

The Auxiliary to KMA will hold its 55th Annual Convention in conjunction with the KMA Annual Meeting, September 26-28, at the Ramada Inn, Hurstbourne Lane. Once again, the Auxiliary poolside hospitality suite will be open to all members, their spouses, and guests. There will be slides from auxiliaries around the state and scrapbooks to enjoy. There will be a prize for the best scrapbook, so you still have time to "get it all together" for convention.

x

Dr. Fred Alsop, Assistant Professor of Biology at East Tennessee State University, will show a slide presentation on Monday at 1 p.m. Dr. Alsop is a nationally-known, professional wildlife photographer.

A continental breakfast will be served poolside from 7:30 to 8:45 a.m. Tuesday. Open to KMA and AKMA members, reservations are required. On Tuesday at 11:30 a.m. our luncheon to honor Past Presidents, install newly elected officers, and view a fashion show by Embry's will be held at Big Springs Country Club. Auxiliary members from around the state will serve as models.

i

Following the President's Luncheon on Wednesday, will be a tour of Louisville homes and tea. Benefits will go to AMA-ERF and you are urged to invite your friends. Transportation will be provided.

DELEGATES AND SPOUSES. The Auxiliary will serve a pot luck dinner in the Hospitality Suite from 4:30 to 6:00 p.m., Wednesday. Since the KMA House of Delegates will be meeting at 6:00 p.m., this dinner will be available for a \$5 charge per person for those delegates not attending caucus dinners prior to the session.

e

Convention is always educational and entertaining. If your spouse is not a member or has been inactive—we would like to invite him or her to JOIN US!

CONVENTION 1977

Registration in Lobby

MONDAY, September 26

i

- 10:00 a.m. Budget Meeting, Hospitality Suite
- 1:00 p.m. Dr. Alsop's Slide Presentation
- 2:15 - 4:15 p.m. ... Pre-Convention Board Meeting
- 6:00 p.m. KEMPAC Reception and Dinner with
Guest Speaker, Otis Bowen, M.D.,
Governor of Indiana

a

TUESDAY, September 27

- 7:30 - 8:45 a.m. ... Poolside Continental Breakfast
- 9:00 - 11:00 a.m. ... AKMA House of Delegates Session
- 11:30 a.m. Luncheon—Big Springs Country Club
with Style Show by Embry's
- 5:30 - 7:00 p.m. ... Reception Honoring KMA and AKMA
Presidents-Elect, Poolside

r

WEDNESDAY, September 28

- 7:30 - 8:45 a.m. ... Continental Breakfast
- 9:00 a.m. Post-Convention Board Meeting
- 11:50 a.m. KMA President's Luncheon with Speaker
Mr. Grady Nutt
- 2:15 p.m. House Tour and Tea
- 4:30 - 6:00 p.m. ... Potluck dinner for Delegates, Spouses

y

HOSPITALITY SUITE—ROOM 1132—POOLSIDE



POSTGRADUATE OPPORTUNITIES



IN KENTUCKY

AUGUST

- 23 "Differential Diagnosis of Headache," Whitesburg Appalachian Regional Hospital, Whitesburg

SEPTEMBER

- 15 John I. Perlstein Memorial Lectureship, "Sexual Differentiation—Normal and Abnormal," by Robert Blizzard, M.D., Charlottesville; Health Sciences Center Auditorium, Louisville
- 16-17 Fiberoptic Bronchoscopy Workshop, University of Kentucky Medical Center, Fee: \$200.
- 17-21 Medicine Update—1977**, Kenlake State Park
- 22-24 Second Annual Postgraduate Course in Gynecologic Surgery**, University of Louisville Health Sciences Center, Louisville
- 26-29 KMA Annual Meeting, Ramada Inn/Bluegrass Convention Center, Louisville

OCTOBER

- 2-7 Eighth Family Medicine Review (Session I)*, University of Kentucky College of Medicine, Hyatt Regency Lexington
- 23-28 (Session II)
- 17-21 Second Family Medicine Review**, University of Louisville School of Medicine, Marriott Inn, Clarksville
- 19-20 Third Annual Symposium—Current Trends in Allergy and Immunology**, Marriott Inn, Clarksville

NOVEMBER

- 4-5 Conference on Cancer of the Bladder and Prostate, Kentucky Division, American Cancer Society, Stouffer's Inn, Louisville. Space limited, no fee. Contact: George A. Sehlinger, M.D., 2313 Medical Arts Bldg., Louisville, Ky. 40217
- 10 13th Annual Louisville Pediatric Society Lectureship, Health Sciences Center Auditorium, Louisville
- 11-12 11th Annual Newborn Symposium, University of Louisville School of Medicine, Louisville

*For further information, contact: Frank R. Lemon, M.D., Associate Dean for Continuing Education, University of Kentucky College of Medicine, Lexington 40506

**For further information contact: Gerald D. Swim, Executive Director, Office of Continuing Education, University of Louisville School of Medicine, Louisville 40202

IN SURROUNDING STATES

OCTOBER

- 3-4 25th Annual Tennessee Valley Medical Assembly, Chattanooga Choo Choo, Convention Hall, Chattanooga. Contact: Woodruff A. Banks, Jr., M.D., 960 E. 3rd St., Suite 313, Chattanooga, Tenn. 37403.
- 5-6 Fourth Annual "Pitfalls in Pediatric Diagnosis and Management," Stouffer's Indianapolis Inn, Indianapolis. Contact: Jay L. Grosfeld, M.D., James Whitcomb Riley Hospital for Children, 1100 W. Michigan St., Indianapolis, Ind. 46202.

NOVEMBER

- 14-16 "The Trauma Patient: Care and Complications," Sponsored by American College of Surgeons and Case Western Reserve Medical School, Marriott Inn, Cleveland

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- ☐ β -ADRENERGIC ACTION THAT RELAXES BRONCHIAL SMOOTH MUSCLE
- ☐ α -ADRENERGIC ACTION THAT REDUCES BRONCHIAL EDEMA AND SECRETIONS
- ☐ synergistic action of ephedrine and theophylline for effective and prolonged bronchodilation
- ☐ dosage forms to meet individual patient needs

For asthma management...

Tedral®/Tedral SA®/Tedral Elixir®

Each tablet contains 130 mg theophylline, 24 mg ephedrine hydrochloride, and 8 mg phenobarbital.

Each tablet contains 180 mg anhydrous theophylline (90 mg in the immediate release layer and 90 mg in the sustained release layer); 48 mg ephedrine hydrochloride (16 mg in the immediate release layer and 32 mg in the sustained release layer); and 25 mg phenobarbital in the immediate release layer.

Each 5 ml teaspoonful contains 32.5 mg theophylline, 6 mg ephedrine HCl, and 2 mg phenobarbital; the alcohol content is 15%.

SUSTAINED ACTION



WARNER/CHILCOTT
Division, Warner-Lambert Company
Morris Plains, New Jersey 07950

T-GP-74-B/

TEDRAL®

TEDRAL® SA Sustained Action

TEDRAL® Elixir

CAUTION: Federal law prohibits dispensing Tedral SA without prescription.

Description. Tedral: each tablet contains 130 mg theophylline, 24 mg ephedrine hydrochloride, and 8 mg phenobarbital.

Tedral SA: each tablet contains 180 mg anhydrous theophylline (90 mg in the immediate release layer and 90 mg in the sustained release layer); 48 mg ephedrine hydrochloride (16 mg in the immediate release layer and 32 mg in the sustained release layer); 25 mg phenobarbital in the immediate release layer.

Tedral Elixir: each 5 ml teaspoonful contains 32.5 mg theophylline, 6 mg ephedrine hydrochloride, and 2 mg phenobarbital; the alcohol content is 15%.

Indications. Tedral, Tedral SA, and Tedral Elixir are indicated for the symptomatic relief of bronchial asthma, asthmatic bronchitis, and other bronchospastic disorders. They may also be used prophylactically to abort or minimize asthmatic attacks and are of value in managing occasional, seasonal or perennial asthma.

Tedral SA (Sustained Action) offers the convenience of b.i.d. dosage.

Tedral Elixir is convenient for persons who may have difficulty in swallowing tablets.

These Tedral formulations are adjuncts in the total management of the asthmatic patient. Acute or severe asthmatic attacks may necessitate supplemental therapy with other drugs by inhalation or other parenteral routes.

Contraindications. Sensitivity to any of the ingredients; porphyria.

Warnings. Drowsiness may occur. PHENOBARBITAL MAY BE HABIT-FORMING.

Precautions. Use with caution in the presence of cardiovascular disease, severe hypertension, hyperthyroidism, prostatic hypertrophy, or glaucoma.

Adverse Reactions. Mild epigastric distress, palpitation, tremulousness, insomnia, difficulty of micturition, and CNS stimulation have been reported.

Average Dosage. *Prophylactic or Therapeutic.*

Tedral: *Adults*—One or two tablets every 4 hours. *Children*—(Over 60 lb) one-half the adult dose.

Tedral SA: *Adults*—One tablet on arising and one tablet 12 hours later. Tablets should not be chewed. *Children*—Not established for children under 12.

Tedral Elixir: *Note:* One teaspoonful is equivalent to *one-quarter* Tedral tablet. *Children*—One teaspoonful per 30 lb body weight, every 4-6 hours, unless prescribed otherwise by physician. Should be given to children under 2 years of age only with extreme caution. *Adults*—One to two tablespoonfuls every four hours.

Supplied. Tedral: White, uncoated scored tablets in bottles of 24 (N 0047-0230-24), 100 (N 0047-0230-51) and 1000 (N 0047-0230-60). Also in Unit Dose—package of 10 x 10 strips (N 0047-0230-11).

Tedral SA: Double-layered, uncoated, coral/mottled white tablets in bottles of 100 (N 0047-0231-51) and 1000 (N 0047-0231-60). Also in Unit Dose—package of 10 x 10 strips (N 0047-0231-11).

Tedral Elixir: Dark red and cherry-flavored in 474 ml (16 fl oz) bottles (N 0047-0242-16).

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Full information is available on request.

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MATERNAL MORTALITY



From the Files of the KMA Maternal Mortality Study Committee

—Edited by John W. Greene, Jr., M.D.

3-73. This 27-year-old married, white female is G4, P3, and was RH negative. Her prenatal course was complicated by hypertension and pre-eclampsia. Her blood pressure ranged between 150/90 to 160/120. Her last menstrual period was April 7, 1972, with EDC of January 14, 1973.

| Date | Wt. | Blood Pressure | Albumin | RX |
|--------|------|----------------|---------|--------------------------------|
| 8/17 | 300+ | 140/90 | 0 | — |
| 9/13 | 300+ | 130/88 | 0 | — |
| 10/11 | 300+ | 140/80 | 0 | — |
| 11/11 | 298 | 160/80 | tr | Hydrodiuril 50 mg |
| 11/18 | | 150/80 | tr | |
| 11/22 | | 156/80 | tr | |
| 11/29 | 290 | 124/80 | tr | |
| 12/13 | 295½ | 150/90 | tr | Hydrodiuril 50 mg |
| 12/21 | 286 | 150/88 | 0 | |
| 12/28 | 286 | 160/110 | 0 | Hydrodiuril 50 mg (Bedrest) |
| 1/4/73 | 284 | 160/120 | 1 | Apresoline 10 mg qid |

The antibody titers during this pregnancy were negative. Her other infants weighed over 8 lbs.

She was admitted to the hospital in labor at 5 a.m. January 14, 1973. She received 100 mg Visteril intramuscularly, which was repeated at 10 a.m. Her membranes ruptured spontaneously at 2 p.m. She received 100 mg Demerol with 100 mg Visteril at 11:30 p.m., and she delivered spontaneously a 9 lb 5 oz female at 2:05 a.m. the 15th, with Penthrone anesthesia. The placenta was expressed intact spontaneously. She was afebrile the 16th, and her blood pressure was normal. The tubal ligation was performed under local supplemental with general when she became uncomfortable at 11 a.m. the 16th. She passed some placental tissue the 17th. There was no mention of vaginal re-examination of the patient. She de-

veloped a wound infection the 18th. She was afebrile and was treated with hot compresses and Ampicillin. The incision was drained and a culture was taken the 19th. She seemed fine on the 20th, fed the baby at 5 a.m., then 20 minutes later was in a terminal condition, apparently gasping for breath. External cardiac massage failed to revive the patient.

The cause of death was listed as pulmonary embolism. There was no autopsy.

Comments

The Committee on Maternal Mortality had difficulty classifying this death because of the lack of an autopsy. The cause of death is most likely pulmonary embolism, but in such a situation as this, other factors could have contributed to her demise.

The Committee commented upon the obesity and hypertension rendering this patient indeed at high risk. There was criticism of the use of diuretics in pregnancy, since currently it is felt these are contraindicated in anyone except those possibly in congestive heart failure, or other cardiac disease, necessitating such diuretic therapy. Thiazide diuretics are contraindicated because of the problems of thrombocytopenia, bone marrow depression, and electrolyte imbalance in the fetus when these agents are used. Many studies have shown that the development of toxemia is not altered in patients when they are on thiazide diuretics.

The Committee criticized the fact that the patient was not hospitalized earlier because of her obesity and hypertension, since she was allowed to carry the baby to term.



Natural balance doesn't always come naturally

Big Balanced Rock, Chiricahua Mountains, Arizona (approx. 1,000 tons)

Most Widely Prescribed—Antivert is the most widely prescribed agent for the management of vertigo* associated with diseases affecting the vestibular system such as Menière's disease, labyrinthitis, and vestibular neuronitis.

Relief of Nausea and Vomiting—Antivert/25 can relieve the nausea and vomiting often associated with vertigo*.

Dosage for Vertigo*—The usual adult dosage for Antivert/25 is 1 tablet t.i.d.

SUMMARY OF PRESCRIBING INFORMATION

INDICATIONS. Based on a review of this drug by the National Academy of Sciences—National Research Council and/or other information, FDA has classified the indications as follows:

Effective: Management of nausea and vomiting and dizziness associated with motion sickness.

Probably Effective: Management of vertigo associated with diseases affecting the vestibular system.

Official classification of the less than effective indications requires further investigation.

CONTRAINDICATIONS. Administration of Antivert (meclizine HCl) during pregnancy or to women who may become pregnant is contraindicated in view of the teratogenic effect of the drug in rats.

The administration of meclizine to pregnant rats during the 12-15 day of gestation has produced cleft palate in the offspring. Limited studies using doses of over 100 mg./kg./day in rabbits and 10 mg./kg./day in pigs and monkeys did not show cleft palate. Congeners of meclizine have caused cleft palate in species other than the rat.

Meclizine HCl is contraindicated in individuals who have shown a previous hypersensitivity to it.

WARNINGS. Since drowsiness may, on occasion, occur with use of this drug, patients should be warned of this possibility and cautioned against driving a car or operating dangerous machinery.


Usage in Children: Clinical studies establishing safety and effectiveness in children have not been done; therefore, usage is not recommended in the pediatric age group.

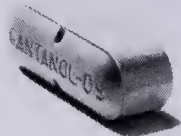
Usage in Pregnancy: See "Contraindications."

ADVERSE REACTIONS. Drowsiness, dry mouth and, on rare occasions, blurred vision have been reported.

More detailed professional information available on request.

ROERIG 
A division of Pfizer Pharmaceuticals
New York, New York 10017

Antivert[®]/25 
(meclizine HCl) 25 mg. Tablets
for vertigo*



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double-strength dosage form
for acute cystitis* patients

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Gantanol® DS (sulfamethoxazole) tablets offer even greater convenience and economy for your patients with acute, uncomplicated cystitis due to susceptible strains of *E. coli*, *Klebsiella-Aerobacter*, *Staphylococcus*, *Proteus mirabilis* and, less frequently, *Proteus vulgaris*... Same amount of medication, the same economy, with only *half* the number of tablets daily. Simplified dosage regimen encourages patient compliance: 2 tablets (1 Gm each) initially, then 1 tablet B.I.D. for 10 to 14 days. Simplicity of efficacy so basic you can start cystitis therapy even before culture results are available.

- In a clinical study of 406 patients on Gantanol (sulfamethoxazole) B.I.D., close to 9 out of 10 patients achieved negative urine cultures. While Gantanol tablets were used in this study, one Gantanol DS tablet has been proved bioequivalent to two Gantanol tablets.*

Gantanol is contraindicated during pregnancy, during the nursing period, and in infants under 2 months. During therapy, maintain adequate fluid intake, perform frequent CBC's and urinalyses with careful microscopic examination.

*Data on file, Hoffmann-La Roche Inc., Nutley, New Jersey.

and economy

When prescribing, please consult complete product literature, a summary of which follows:

Indications: Acute, recurrent or chronic urinary tract infections, primarily pyelonephritis, pyelitis and cystitis, due to susceptible organisms (usually *E. coli*, *Klebsiella-Aerobacter*, *Staphylococcus*, *Proteus mirabilis* and, less frequently, *Proteus vulgaris*), in the absence of obstructive uropathy or renal calculi. Note: Carefully coordinate *in vitro* sulfonamide sensitivity tests with bacteriologic and clinical response; add aminobenzoic acid to follow-up culture to detect the increasing frequency of resistant organisms. Measure sulfonamide blood levels as variations in the usefulness of antibacterials including sulfonamides, especially in chronic or recurrent urinary tract infections. Measure sulfonamide blood levels as variations in response; 20 mg/100 ml should be maximum total level.

Contraindications: Sulfonamide hypersensitivity; pregnancy, term and during nursing period; infants less than 2 months of age.

Warnings: Safety during pregnancy has not been established. Sulfonamides should not be used for group A streptococcal infections and will not eradicate sequelae (rheumatic fever, glomerulonephritis) of such infections. Deaths from hypersensitivity reactions, agranulocytosis, aplastic anemia and other blood disorders have been reported and early clinical signs (fever, pallor, purpura or jaundice) may indicate serious blood disorders. Frequent CBC and urinalysis with microscopic examination are recommended during therapy. Insufficient data on children under 2 years of age with chronic renal disease.

Precautions: Use cautiously in patients with impaired renal function, severe allergy, bronchial asthma; in glucose-6-phosphate dehydrogenase-deficient individuals in whom drug-related hemolysis may occur. Maintain adequate fluid intake to prevent crystalluria and stone formation.

Reactions: *Blood dyscrasias* (agranulocytosis, anemia, thrombocytopenia, leukopenia, hemolytic purpura, hypoproliferative anemia and methemoglobinemia); *allergic reactions* (erythema multiforme, skin rash, epidermal necrolysis, urticaria, serum sickness,

pruritus, exfoliative dermatitis, anaphylactoid reactions, periorbital edema, conjunctival and scleral injection, photosensitization, arthralgia and allergic myocarditis); *gastrointestinal reactions* (nausea, emesis, abdominal pains, hepatitis, diarrhea, anorexia, pancreatitis and stomatitis); *CNS reactions* (headache, peripheral neuritis, mental depression, convulsions, ataxia, hallucinations, tinnitus, vertigo and insomnia); *miscellaneous reactions* (drug fever, chills, toxic nephrosis with oliguria and anuria, periarteritis nodosa and L.E. phenomenon). Due to certain chemical similarities with some goitrogens, diuretics (acetazolamide, thiazides) and oral hypoglycemic agents, sulfonamides have caused rare instances of goiter production, diuresis and hypoglycemia as well as thyroid malignancies in rats following long-term administration. Cross-sensitivity with these agents may exist.

Dosage: Systemic sulfonamides are contraindicated in infants under 2 months of age (except adjunctively with pyrimethamine in congenital toxoplasmosis). *Usual adult dosage:* 2 Gm (2 DS tabs or 4 tabs or 4 teasps.) initially, then 1 Gm *b.i.d.* or *t.i.d.* depending on severity of infection.

Usual child's dosage: 0.5 Gm (1 tab or teasps.)/20 lbs of body weight initially, then 0.25 Gm/20 lbs *b.i.d.* Maximum dose should not exceed 75 mg/kg/24 hrs.

Supplied: DS (double strength) tablets, 1 Gm sulfamethoxazole; Tablets, 0.5 Gm sulfamethoxazole; Suspension, 0.5 Gm sulfamethoxazole/teaspoonful.

Basic therapy with convenience and economy:

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Each capsule contains 50 mg. of Dyrenium® (triamterene, SK&F Co.) and 25 mg. of hydrochlorothiazide.

MAKES SENSE

Before prescribing, see complete prescribing information in SK&F Co. literature or PDR. A brief summary follows:

* Warning

This drug is not indicated for initial therapy of edema or hypertension. Edema or hypertension requires therapy titrated to the individual. If this combination represents the dosage so determined, its use may be more convenient in patient management. Treatment of hypertension and edema is not static, but must be reevaluated as conditions in each patient warrant.

* **Indications:** When the combination represents the dosage determined by titration: Adjunctive therapy in edema associated with congestive heart failure, hepatic cirrhosis, the nephrotic syndrome. Corticosteroid and estrogen-induced edema, idiopathic edema; hypertension, when the potassium sparing action of triamterene is warranted. (See Box Warning.) Routine use of diuretics in healthy pregnant women is inappropriate; they are indicated in pregnancy only when edema is due to pathological causes.

Contraindications: Further use in anuria, progressive renal or hepatic dysfunction, hyperkalemia. Pre-existing elevated serum potassium. Hypersensitivity to either component or other sulfonamide-derived drugs.

Warnings: Do not use potassium supplements, dietary or otherwise, unless hypokalemia develops or dietary intake of potassium is markedly impaired. If supplementary potassium is needed, potassium tablets should not be used. Hyperkalemia can occur, and has been associated with cardiac irregularities. It is more likely in the severely ill, with urine volume less than one liter/day, the elderly and diabetics with suspected or confirmed renal insufficiency. Periodically, serum K⁺ levels should be determined. If hyperkalemia develops, substitute a thiazide alone, restrict K⁺ intake. Associated widened QRS complex or arrhythmia requires prompt additional therapy. Thiazides cross the placental barrier and appear in cord blood. Use in pregnancy requires weighing anticipated benefits against possible hazards, including fetal or neonatal jaundice, thrombocytopenia, other adverse reactions seen in adults. Thiazides appear and triamterene may appear in breast milk. If their use is essential, the patient should stop nursing. Adequate information on use in children is not available.

Precautions: Do periodic serum electrolyte determinations (particularly important in patients vomiting excessively or receiving parenteral fluids).

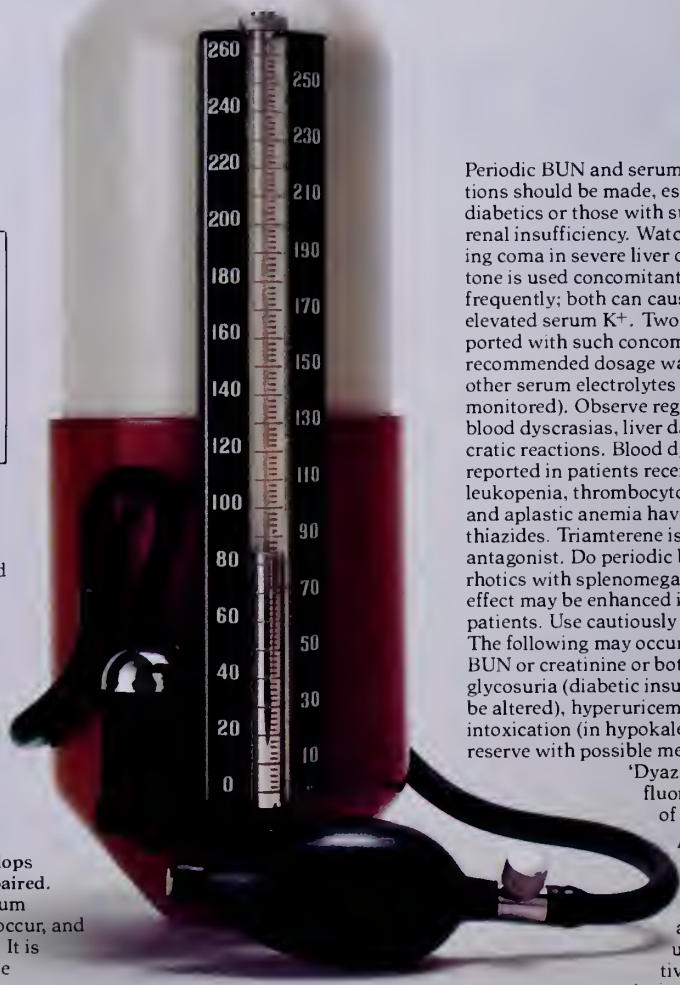
Periodic BUN and serum creatinine determinations should be made, especially in the elderly, diabetics or those with suspected or confirmed renal insufficiency. Watch for signs of impending coma in severe liver disease. If spironolactone is used concomitantly, determine serum K⁺ frequently; both can cause K⁺ retention and elevated serum K⁺. Two deaths have been reported with such concomitant therapy (in one, recommended dosage was exceeded, in the other serum electrolytes were not properly monitored). Observe regularly for possible blood dyscrasias, liver damage, other idiosyncratic reactions. Blood dyscrasias have been reported in patients receiving triamterene, and leukopenia, thrombocytopenia, agranulocytosis and aplastic anemia have been reported with thiazides. Triamterene is a weak folic acid antagonist. Do periodic blood studies in cirrhotics with splenomegaly. Antihypertensive effect may be enhanced in post-sympathectomy patients. Use cautiously in surgical patients. The following may occur: transient elevated BUN or creatinine or both, hyperglycemia and glycosuria (diabetic insulin requirements may be altered), hyperuricemia and gout, digitalis intoxication (in hypokalemia), decreasing alkali reserve with possible metabolic acidosis.

'Dyazide' interferes with fluorescent measurement of quinidine.

Adverse Reactions:

Muscle cramps, weakness, dizziness, headache, dry mouth; anaphylaxis, rash, urticaria, photosensitivity, purpura, other dermatological conditions; nausea and vomiting, diarrhea, constipation, other gastrointestinal disturbances. Necrotizing vasculitis, paresthesias, icterus, pancreatitis, xanthopsia and, rarely, allergic pneumonitis have occurred with thiazides alone.

Supplied: Bottles of 100 and 1000 capsules; Single Unit Packages of 100 (intended for institutional use only).



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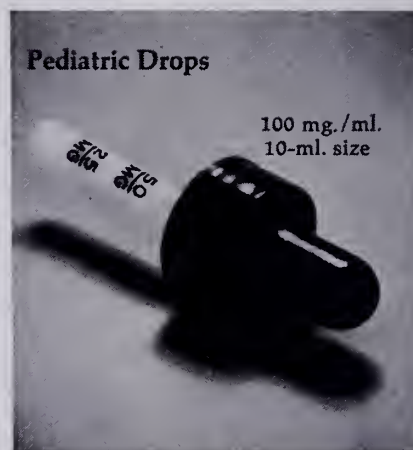
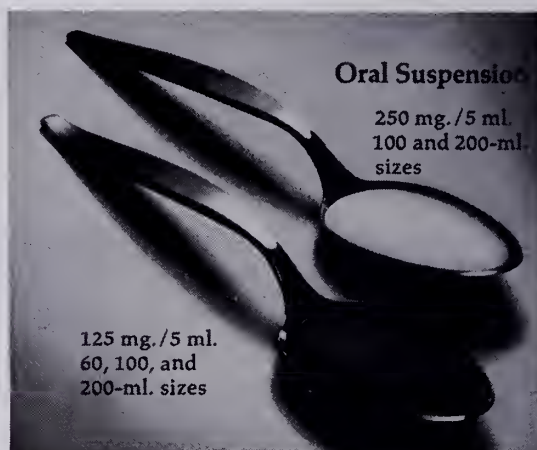
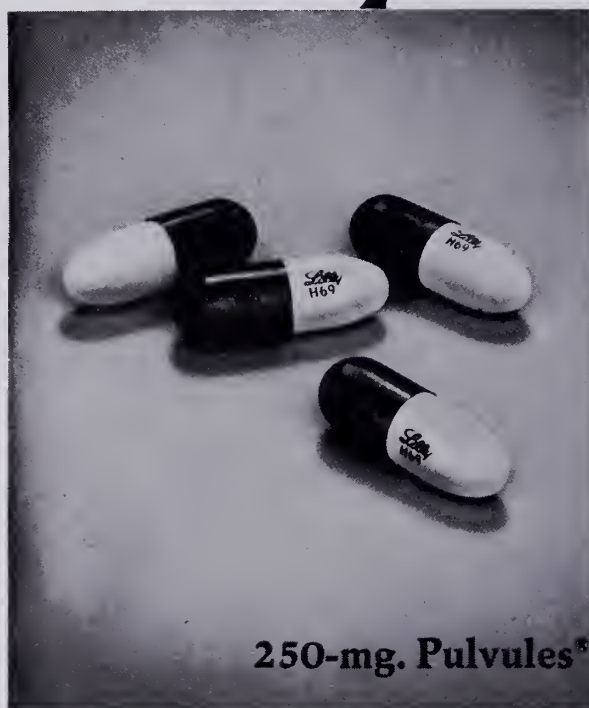
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Corticosteroids in Post-Influenzal Adult Respiratory Distress Syndrome†

BARRY S. STOLER, M.D.* and RAY S. DAVIS, M.S.

Louisville, Kentucky

Six patients with Adult Respiratory Distress Syndrome (ARDS) following a flu-like illness are reported here. The first case was treated with a standard medical regimen including the MA-1 respirator with continuous positive and expiratory pressure (CPPB), and had a protracted almost fatal illness. The second case was quickly fatal. Following these cases, the next four consecutive patients were treated with the same standard supportive regimen, including fluid management, MA-1 supported respirations, and 12 to 15 cm CPPB, and additionally corticosteroids in doses of approximately 2000 mg methylprednisolone/72 hours after the onset of critical illness. All patients had a less severe course of illness, and there were no further fatalities. There were no side effects attributable to the steroids.

Adult Respiratory Distress Syndrome (ARDS), often called "Shock Lung" or "Post-traumatic Pulmonary Insufficiency" is a syndrome of life-threatening progressive pulmonary insufficiency.³ ARDS was first recognized as a distinct entity during World War II,⁴ but has been increasing in frequency due to the recently improved care for severely ill patients in Intensive Care Units.

The etiology of ARDS is varied, being seen after pulmonary and nonpulmonary trauma, following all types of shock, in fluid imbalance, in pulmonary and fat emboli, aspiration pneumonia, and with many infections.

Accepted modalities of therapy have included careful attention to oxygenation and ventilatory support, fluid and electrolyte balance, appropri-

ate treatment of infections and other systems support. The use of corticosteroids in the treatment regimen has been controversial, especially in the presence of infections.

The influenza epidemic in Louisville during the winter of 1975-76 resulted in a number of cases of ARDS. Previous experience by the authors in the treatment of ARDS of all etiologies using the "standard approach" plus methylprednisolone (20-30 mg/kg/48 hrs) suggested that steroid therapy was beneficial, and had a salutary influence on the outcome of the illness in spite of the potential hazards of such therapy in severe infections. The results in six cases of ARDS treated during the epidemic suggests the favorable influence of steroid therapy.

Case Reports

Case #1: A. E. A 65-year-old female was admitted to Baptist East Hospital on Feb 9, 1976, with a history of headache, dyspnea, cough, sore throat, diarrhea, and malaise of several days duration. She was acutely ill, with a temperature of 103 F, tachypnea, and tachycardia. There were scattered basilar rhonchi bilaterally, and a chest x-ray showed right lower lobe pneumonia, from which no organism was isolated. The WBC was 18,900/mm³ with a left shift. Despite antibiotics she deteriorated rapidly, with a temperature of 104 F., hypotension, and severe tachycardia. The arterial blood gases (while receiving 4 L/min O₂), pO₂ 33.7mm Hg, pCO₂ 24.1mm Hg, pH of 7.486. The chest x-ray showed extensive bilateral pneumonia, with little functioning lung tissue. A diagnosis of post-influenza ARDS was made, and

†From the Department of Medicine, University of Louisville School of Medicine, Louisville.

*Reprint requests should be sent to Doctor Stoler, Suite 1200, Commonwealth Building, Louisville, Kentucky 40202.

Received at KMA: 4-13-77

she was placed on an MA-1 volume respirator and CPPB (continuous positive pressure breathing), and Gentamicin was added to the Keflin, with which she was treated initially. The patient became comatose and shocky, was maintained on vasopressors for days, and a tracheostomy was performed. The patient stabilized slowly, and weaning from the respirator was begun on Feb 19, 1976; she gradually improved. She was discharged from the hospital on March 6, 1976, with arterial gases (on room air) of pO_2 of 60 mm Hg, pCO_2 40 mm Hg, pH 7.47. She did not receive corticosteroids.

Case #2: E. G. A 30-year-old previously healthy female was admitted to Suburban Hospital on the evening of Feb 28, 1976, with a history of fever, chills, headache, malaise, and vomiting. On admission she had a blood pressure of 80/40 mm Hg, pulse 144/min, respirations 24/min, temperature of 103 F., and evidence of marked dehydration. The WBC was 14,000/mm³ with a left shift, and an x-ray of the chest was normal. She was treated conservatively, but fever continued, and on Feb 28, 1976, while on 4 L/min O_2 arterial blood gases were pO_2 170.2 mm Hg, pCO_2 15 mm Hg, and pH 7.257. The patient had a normal chest x-ray on Feb 28, 1976, but deteriorated rapidly the next morning. Her arterial blood gases (on 5 L/min O_2) were pO_2 42.0 mm Hg, pCO_2 35.6 mm Hg, and pH 7.464. She was profoundly hypotensive and tachypneic, and in respiratory distress, with bilateral rales and rhonchi. A diagnosis of post-influenza ARDS was made, and she was intubated and placed on an MA-1 respirator.

She did not receive corticosteroids. She expired three hours later.

Case #3: J. L. A 68-year-old former coal miner with known COPD (chronic obstructive pulmonary disease) and pneumoconiosis was admitted to Suburban Hospital on March 4, 1976, in acute distress, and with flu-like symptoms which he had five days earlier, following exposure in his physician's office. His pulmonary status had been stable prior to this illness, but at the time of admission the temperature was 100 F., and respirations 32/min, with bilateral rhonchi and wheezing. An x-ray of the chest showed chronic changes, and a lingular infiltrate. No pathogen was grown from his sputum. He had blood gases on room air showing pO_2 57.7 mm Hg, pCO_2 36 mm Hg, and pH 7.44. He was treated with antibi-

otics, bronchodilators, and low dose Solu-Medrol (40 mgm q8 hrs). On March 10, 1976, tracheostomy was done for control of secretions, but he continued to worsen, and blood gases on March 11, 1976 (on 12 L/min O_2) were pO_2 57.1 mm Hg, pCO_2 39.3 mm Hg, and pH 7.457. He had developed ARDS confirmed by x-ray, and was placed on the MA-1 respirator and CPPB (continuous positive pressure breathing), finally necessitating 14 cm CPPB (with 60% O_2 in the inspired air) to produce pO_2 57.3 mm Hg, pCO_2 38.5 mm Hg, and pH 7.47.

From March 11-14, 1976, he received an additional 1680 mg of Solu-Medrol, along with Keflin and Gentamicin. On March 15, 1976 he improved, and weaning was started the next day. He was totally free of the respirator by March 24, 1976, and was discharged on the 29th, with his tracheostomy out, and his arterial blood gases (on 2 L/min O_2) of pO_2 62.1 mm Hg, pCO_2 37.8 mm Hg, and pH 7.471.

Case #4: S. W. A 62-year-old female was admitted to Suburban Hospital on March 18, 1976, with a history of flu-like illness, fever, chills, headache, nonproductive cough, and general malaise for seven days. There was no prior lung disease, but she had smoked a package of cigarettes a day for more than 30 years. She was in moderate distress on admission, with temperature of 101 F., and respirations 24/min, pulse of 96/min, and blood pressure 110/70 mm Hg. The WBC was 6,000/mm³, with a left shift. Physical examination revealed some fine crackling rales in the left chest. An x-ray of the chest showed bilateral pneumonia, with the left more involved than the right. Treatment was started with antibiotics, conservative therapy, and no pathogenic organism was recovered from her sputum. She deteriorated quickly, and on March 20, 1976 had arterial blood gases (on 15 L/min O_2) of pO_2 31.7 mm Hg, pCO_2 31.1 mm Hg, and pH 7.425. She was placed on MA-1 respirator, with CPPB, and a tracheostomy was performed. The chest x-ray revealed that the lungs had almost completely opacified. Further antibiotics were started, and between March 20-23, 1976, she received 1,970 mg Solu-Medrol. On March 23, the chest x-ray revealed improvement, but clinical progress was slow, and she was not completely weaned from the MA-1 until April 17, 1976. No pathogen was isolated from her sputum.

At the time of her discharge from the hospital

her pO_2 was 57.8 mm Hg, with normal pCO_2 and pH on room air, and her tracheostomy site was healed, and lungs dramatically cleared.

Case #5: M. R. A 47-year-old female was admitted to Suburban Hospital on the evening of March 19, 1976 with a three-day history of "flu-like symptoms", fever, dry cough, headaches, and malaise. She had previously been healthy, and smoked a package of cigarettes per day. On admission she was afebrile, respirations were 20/min, pulse 120/min, and blood pressure 134/80 mm Hg. Her lungs had decreased breath sounds at the bases, and the chest x-ray showed a left lower lobe pneumonia with effusion, from which no organism was isolated. The ABG on admission, on room air, revealed a pO_2 of 57 mm Hg, pCO_2 of 28 mm Hg, and pH of 7.434. The WBC was 20,200/mm³, with a left axis shift.

She was treated conservatively with antibiotics, and deteriorated rapidly. On the evening of March 23, 1976, she had extreme respiratory distress, was semi-comatose, and ABG (on 5 L/min) of pO_2 38.7 mm Hg, pCO_2 36.2 mm Hg, and pH 7.423. Basilar rales and rhonchi were present, and bilateral infiltrates were noted on chest x-ray. She was intubated and placed on the MA-1 respirator with CPPB and additional antibiotics. She received 1,460 mg Solu-Medrol over the next 72 hours, and was able to be weaned by March 27, 1976 without tracheostomy.

On March 29, 1976 she developed fever even though the chest x-ray was clearing, and *Serratia marcescens* was cultured from her sputum. This responded to antibiotic therapy, and the patient was discharged. The chest cleared on x-ray examination, and a pO_2 was above 60 mm Hg on room air.

Case #6: T. R. An 88-year-old man with a history of a cerebrovascular accident, but no previous lung difficulties, was admitted to Suburban Hospital on April 5, 1976 with a two-day history of fever, dyspnea, cough, vomiting, diarrhea, and general malaise. He was able to care for himself, and was completely oriented. His blood pressure was 80/60 mm Hg, temperature 102 F, respirations 50/min, and pulse 96/min. His chest had bilateral harsh rhonchi, with a left lower lobe pneumonia on x-ray. His WBC was 10,200/mm³, with a left axis shift, but no pathogen was grown out of his sputum. He was started on antibiotic therapy, and supportive measures, but deteriorated very rapidly.

Early on April 6, 1976, (on 5 L/min O_2) his pO_2 was 33.4 mm Hg, pCO_2 33.2 mm Hg, and pH of 7.282. He was in severe distress with hypotension, requiring vasopressors. The chest x-ray was compatible with post-influenzal ARDS. He was given additional antibiotics and placed on an MA-1 respirator, with CPPB, and between April 6-9 he received 1,920 mg of Solu-Medrol. The pulmonary status improved rapidly, and he was able to be weaned off the MA-1 by April 11, 1976, without having a tracheostomy performed, and his chest x-ray cleared. Unfortunately, he developed acute tubular necrosis secondary to the hypotension, became uremic, and had brain damage. He never regained his pre-influenzal cerebral capacities.

Corticosteroids in massive doses can be used with relative safety as an adjunctive, potentially life-saving treatment in patients with post-influenza ARDS; and further studies in this area are clearly indicated.

Discussion

A. ARDS PATHOGENESIS

Studies of the pathogenesis of ARDS suggest that the lung responds to acute injury in a limited manner, practically independent of the insult. Initially, constriction of precapillary arterioles and increased vascular permeability contribute to the early signs of interstitial pulmonary edema. The vasoconstriction hinders adequate perfusion of areas of the lung and alveolar epithelial cells and vascular endothelial cells become altered in such a way that diffusion of oxygen from the alveolus to the RBC becomes hampered. The surfactant producing alveolar type II cells are destroyed by the existent hypoxia, thus decreasing surfactant production, increasing alveolar surface tension, and resulting in alveolar collapse. In addition, transudation into alveoli creates further diffusion difficulties and polymorphonuclear leukocytes release proteolytic and hydrolytic enzymes which contribute further to cellular destruction.⁷

B. CLINICAL PHASES

Moore² outlined four phases through which patients progress during ARDS. Phase I is the period following the initial insult when attention is directed toward immediate emergency therapy. Phase II shows the development of resistant hypoxemia with marked physiologic shunting due to perfusion of unventilated alveoli. In Phase III

pulmonary insufficiency worsens with appearance of complications such as secondary infections, and Phase IV is that of terminal hypoxemia, hypercarbia, and coma leading to death.²

C. "STANDARD MANAGEMENT"

Standard management of ARDS can be divided into two major areas of concern; the first involving maintenance of adequate ventilation while the second involves fluid and electrolyte balance, antibiotics, and other physiologic support. The mode of ventilatory support, i.e., nasal O₂, intubation and/or tracheostomy with continuous ventilation depends upon the patient's clinical status. In addition, CPPB is quite beneficial in some cases, possibly by expanding alveoli and inhibiting alveolar collapse and therefore decreasing the amount of physiologic shunting of unoxygenated blood to the left atrium. The judicious use of fluids has been advocated and some authors recommend intensive dehydration to prevent "wet lung syndrome".⁸ Antibiotic therapy should be instituted at the first sign of bacterial pneumonia because of the high mortality associated with this complication.

D. CORTICOSTEROIDS

While the "standard management" has become generally accepted, the additional use of corticosteroids is controversial. Murray¹⁰ states that unless ARDS is due to the aspiration of gastric contents, inhalation of toxic fumes, or fat emboli, "corticosteroids are contra-indicated". Also, steroids may decrease immunologic defense mechanisms.¹¹

There is growing evidence that, in theory and clinical application, corticosteroids have a place in the therapy of ARDS. Wilson⁷ has shown that methylprednisolone has the properties of stabilizing membranes, enhancing production of surfactant, and producing vasodilation during low output conditions. Methylprednisolone has also been shown to stabilize PMN (polymorphonuclear

leukocyte) membranes, and by inhibiting inflammation it may minimize interstitial fibrosis which could compound the difficulties of the patient's recovery.⁹ James³ has shown that in a series of 63 patients, of whom 46 were treated with steroids, there was a "definite decrease in the number of deaths from shock lung when the steroid treatment was started early. . . ." Petty¹ has stated that "clinical experience indicates the use of corticosteroid drugs is highly beneficial in patients with ARDS."

Results

In the six cases presented here (Table 1) there was only one fatality directly related to respiratory failure. (Case No. 2) The prolonged and stormy course of the first case and the rapid demise of the second case (without steroid therapy) prompted the introduction of such therapy in the third case. This man (severe underlying COPD and coal worker's pneumoconiosis) had a dramatic recovery, and left the hospital close to his pre-illness state of health. Encouraged by this when the fourth and fifth cases presented, there was little hesitancy to initiate steroid therapy when these patients became desperately ill. In patient No. 4 the hypoxia was most severe, and appeared irreversible, but did finally improve. This patient is still mildly hypoxic on room air, with a pO₂ of approximately 60 on room air, but continues to improve. Patient No. 5 did have a secondary *Serratia marcescens* pneumonia after her respiratory care. This responded to appropriate antibiotics and she left the hospital with a pO₂ close to 70 mm Hg. The sixth case was a remarkably spry 88-year-old man whose pulmonary status reversed gradually, but whose recovery was severely impeded by renal failure and CNS damage secondary to hypoxia and shock. His lungs reverted to his pre-influenza status.

The survival of four consecutive extraordinarily ill patients with little permanent pulmonary or other sequelae is quite remarkable. All evidence

Table 1

| Patient | Sex | Age | Survival | MA-1 Days | Solu-Medrol in 72 hrs. from start of MA-1 |
|---------|-----|-----|----------|--------------|---|
| A. E. | F | 65 | Yes | 19 | 0 |
| E. G. | F | 30 | No | 1 | 0 |
| J. L. | M | 68 | Yes | 13 | 1,800 mg |
| S. W. | F | 62 | Yes | 28 | 1,970 mg |
| M. R. | F | 47 | Yes | 5 | 1,460 mg |
| T. R. | M | 88 | Yes | 6 | 1,920 mg |

here seems to show that the steroids are beneficial, and play a significant role in the recovery of patients with ARDS secondary to flu-like illnesses.

One striking feature of this study is the lack of evidence that steroids cause any massive or overwhelming infection or other side effects. Corticosteroid therapy should be considered as an adjunctive therapeutic modality in patients developing a post-influenza ARDS.

Conclusion

The ARDS following influenza-like illnesses is life-threatening, but is potentially reversible. The standard treatment regimen of ventilatory support, fluid and electrolyte balance, and antibiotics can be safely supplemented by the use of Methylprednisolone (20-30 mg/kg/48-72 hrs). Six cases seen by a pulmonary specialty group during the flu epidemic of 1975-76 are reported with a survival of the last four consecutive cases who were treated with steroids. There were no untoward effects that could be attributed to the use of the steroids. Massive doses of corticosteroids should be considered as adjunctive therapy in patients with post-influenza ARDS.

Acknowledgement

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References

1. Petty, T.L., Ashbaugh, D.G., The Adult Respiratory Distress Syndrome: Clinical features, factors influencing prognosis and principles of management. *Chest* 60:233-239, 1971.
2. Moore, F.O., Lyone, J.H., Pierce, E.C. Jr., et al: *Post-Traumatic Pulmonary Insufficiency*. Philadelphia, W. B. Saunders Co., 1969.
3. James, P.M., Jr.: Treatment of Shock Lung. *The American Surgeon* 41:451-456, 1975.
4. Burford, T.H., Burbank, B.: Traumatic Wet Lung; Observations on Certain Physiologic Fundamentals of Thoracic Trauma. *J. Thorac. Cardiovasc. Surg.* 14:415, 1945.
5. Eiseman, B., Ashbaugh, D.G. (eds): Pulmonary Effects of Non-Thoracic Trauma: Proceedings of a Conference Conducted by the Committee on Trauma, Division of Medical Sciences, NAS-NRS. *J. Trauma* 8:625, 1968.
6. Rosen, A.J.: Shock Lung: Fact or Fancy? *Surg. Clin. of N.A.* 55:613-626, 1975.
7. Wilson, J.W.: Treatment of Prevention of Pulmonary Cellular Damage with Pharmacologic Doses of Corticosteroid. *Surg. Gynec. Obstet.* 134:675-681, 1972.
8. Solliday, N.H., Shapiro, B.A., Gracey, D.R.: Adult Respiratory Distress Syndrome: Clinical conference in pulmonary disease from Northwestern University—McGar Medical Center, Chicago. *Chest* 69:207-213, 1976.
9. O'Brien, T.G., Sweeney, D.F.: Interstitial Viral Pneumonitis Complicated by Severe Respiratory Failure: Successful management using intensive dehydration and steroids. *Chest* 63:314-321, 1973.
10. Murray, J.F.: Shock Lung. *Clin. Notes Resp. Dis.* 13:3-10, 1974.
11. Wardle, E.N.: Post-Traumatic respiratory insufficiency: What is "Shock Lung"? *J. Roy. Coll. Physcns. Lond.* 8:251-266, 1974.

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The Anemic Newborn

DAVID H. ADAMKIN, M.D.*

Louisville, Kentucky

Anemia in the newborn period must be promptly diagnosed and may require life-saving intervention. The manuscript presents a diagnostic flow chart and description of immediate intensive care principles to deal effectively with the most distressed neonate.

Anemia in the newborn is a most serious and life threatening situation. Prompt, rational efforts at diagnosis and treatment are essential. This review includes a flow sheet (Table 1) to aid in the diagnosis and focuses attention on the management of the most critically threatened neonate whose very survival requires immediate intensive

life-saving intervention.

Profound anemia at birth is usually the result of hemorrhage or hemolysis due to isoimmunization. When anemia becomes apparent after the first 24 hours of life, additional causes must be considered, such as external or internal hemorrhages or a variety of nonimmune hemolytic disorders.¹

Types of hemorrhage in the newborn can be divided into three major etiologic categories (Table 2). An understanding of blood volumes in newborns aids in realizing that the acute loss of 30 to 50 ml of blood in a neonate can produce pallor and shock. For example, a 28-week premature infant weighing 1 kg has a blood volume of between 90-100 ml or approximately 100 ml/kg for the preterm infant. The term infant weighing 3.5 kg has a blood volume of about 255 ml or 85 ml/kg for the term infant.

Table 3 illustrates characteristics of acute versus chronic blood loss. After appropriate diag-

*Fellow in Neonatal Medicine, University of Louisville School of Medicine, Louisville
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Table 1
THE ANEMIC NEWBORN¹

History—Family, Maternal and Obstetric
Hemoglobin, Reticulocyte Count, Blood Smear, Direct Coombs' Test

| Reticulocyte count, normal or elevated | | Reticulocyte count, subnormal | |
|---|---|--|--|
| Coombs' test, Positive | Coombs' test, Negative | Consider: Congenital hypoplastic anemia Perform bone marrow examination | |
| Isoimmunization Rh ABO Minor Group | peripheral blood smear | Specific morphologic abnormalities | Normochromic Normocytic |
| Perform blood typing of mother and infant and look for maternal antibodies. | Consider: Chronic fetomaternal transfusion or twin-to-twin transfusion. Examine maternal blood for fetal cells. | Spherocytes Elliptocytes Stomatocytes Pyknocytes | No jaundice or hepatosplenomegaly Jaundice generally present |
| | | | Consider acute blood loss Obstetric accident Fetomaternal hemorrhage Internal hemorrhage |
| | | Congenital enzymatic defects of red cell G-6-PD Pyruvate Kinase and Others | Other Galactosemia Respiratory Distress Osteopetrosis Leukemia Infections Bacterial Viral Cytomegalic inclusion Disease Congenital syphilis Congenital toxoplasmosis |

Table 2
TYPES OF HEMORRHAGE IN THE NEWBORN¹

Obstetric Accidents, Malformations of the Placenta and Cord

- Rupture of a normal umbilical cord
 - Precipitous delivery
 - Entanglement
- Hematoma of the cord or placenta
- Rupture of an abnormal umbilical cord
 - Varices
 - Aneurysm
- Rupture of anomalous vessels
 - Aberrant vessel
 - Velamentous insertion
 - Communicating vessels in multilobed placenta
- Incision of placenta during cesarean section
- Placenta previa
- Abruptio placentae

Occult hemorrhage prior to birth

- Fetomaternal
 - Traumatic amniocentesis
 - Spontaneous
 - Following external cephalic version
- Twin to twin

Internal hemorrhage

- Intracranial
- Giant cephalohematoma, caput succedaneum
- Retroperitoneal
- Ruptured liver
- Ruptured spleen

nosis, the treatment of chronic loss involves packed red blood cells, partial exchange transfusion, or iron replacement. Treatment depends on severity and the recognition of accompanying congestive heart failure.

Management of acute blood loss for the severely anemic distressed infant embodies all the essentials of pediatric intensive care:

(1) Resuscitation: Immediate airway management including intubation with oxygen administration if necessary.

(2) Type and Cross: As an immediate "life-line" is being placed in the umbilical vein, a

sample for central hemoglobin determination and for cross-matching can be drawn.

(3) Volume replacement: If immediate expansion of the blood volume is indicated by obvious shock or low venous or arterial pressure then the best expanders immediately available would be group O Rh-negative whole blood or more immediately available colloid containing substances like plasmanate. An initial dose of 20 ml/kg should be rapidly infused and clinical response noted. Very often further volume replacement will be necessary and whole blood is the best choice especially if not used initially.²

(4) Diagnosis: A careful examination of the placenta and umbilical cord may provide a diagnosis. If the site of bleeding is not discovered, the maternal blood should be obtained for estimation of percentage of fetal cells to make the diagnosis of fetomaternal transfusion.

Calculations for transfusions which are helpful include:

(a) The transfusion of 3 ml. of packed red blood cells (pRBC) per Kg raises the hemoglobin concentration by 1 gm/100 ml.³

(b) cc pRBC required = wt(kg) × (desired Hct - initial Hct)

(c) cc pRBC required =

$$\frac{(\text{desired Hb} - \text{initial Hb}) \times 85 \text{ cc/Kg} \times \text{wt(kg)}}{22}$$

Hemoglobin of packed red blood cell

Finally, for the anemic patient that is compromised by high output congestive heart failure, the partial exchange transfusion utilizing packed red blood cells will efficiently expand the red blood

Table 3
The Characteristics of Acute and Chronic Blood Loss in the Newborn¹

| CHARACTERISTIC | ACUTE BLOOD LOSS | CHRONIC BLOOD LOSS |
|-------------------------------------|--|---|
| Clinical | Acute distress; pallor; shallow rapid, and often irregular respiration; tachycardia; weak or absent peripheral pulses; low or absent blood pressure; no hepatosplenomegaly | Marked pallor disproportionate to evidence of distress. On occasion signs of congestive heart failure may be present, including hepatomegaly. |
| Venous pressure | Low | Normal or elevated |
| Laboratory Hemoglobin concentration | May be normal initially; then drops quickly during first 24 hours of life. | Low at birth |
| Red cell morphology | Normochromic and macrocytic | Hypochromic and microcytic; Anisocytosis and poikilocytosis |
| Serum iron | Normal at birth | Low at birth |
| Course | Prompt treatment of anemia and shock, necessary to prevent death | Generally uneventful |
| Treatment | Intravenous fluids and whole blood; Iron therapy later | Iron therapy; Packed red cells may be necessary on occasion |

mass without further compromising the cardiovascular status by increasing blood volume. This may be calculated as follows:

Volume of Exchange —

$$\frac{(\text{ccpRBC}) \times \text{wt}(\text{kg}) \times 85 \text{ cc/kg} \times (\text{desired Hb} - \text{initial Hb})}{22\text{-Hb}_R}$$

Hemoglobin R for this calculation is the hemoglobin of the blood removed during the exchange which is the mean of the initial and final hemoglobins of the exchange transfusion.⁴

$$\text{Hb}_R = \frac{\text{Hb initial} + \text{Hb final}}{2}$$

References

1. Oski, F.A., and Naiman, J.L.: *Hematologic Problems in the Newborn*. Philadelphia, W.B. Saunders Company, 1972. 2nd Edition.
2. Kirkman, H.N., and Riley, H.D., Jr.: Posthemorrhagic anemia and shock in the newborn. A review. *Pediatric*, 24:97, p. 59.
3. Mollison, P.L.: *Blood Transfusion in Clinical Medicine*. 4th Edition, Oxford, Blackwell, 1967, p. 275.
4. Nieburg, P.I., Stockman, J.A., III.: Rapid correction of anemia with partial exchange transfusion. *AJDC*, 131:1, 1977.

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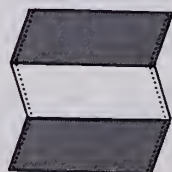
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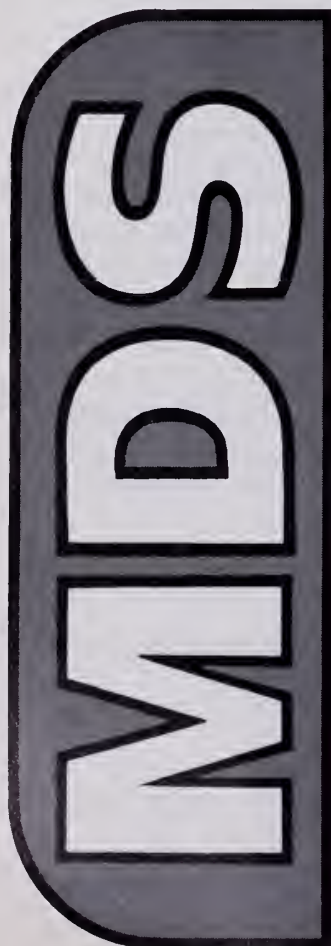
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GRAND ROUNDS



University of Louisville School of Medicine

This Journal feature will be presented alternately by the University of Louisville and the University of Kentucky Departments of Medicine and Departments of Surgery. We hope to have these features revolve around subjects of immediate practical interests to the practicing physician; and, for those of us not able to attend grand rounds in the teaching centers as often as we might, we hope this will represent a bit of a refresher course.

Splenic Abscess: Review of the Literature and Report of Cases*

SPLENIC abscess has never been a frequent occurrence, although a recent ten-year study² found it becoming increasingly common. Splenic abscess was found in 0.22% of 2,840 autopsies in that study. Antemortem diagnosis is difficult because of the many ways in which patients with splenic abscess may present. Indeed, splenic abscess may cause no symptoms at all and be found only incidentally on postmortem examination.

Etiology

The pathogenesis of this elusive entity has been dealt with many times in the literature, with a variety of classifications. Several authors^{5,7} divide splenic abscesses into two groups. The first of these groups, containing approximately one-third of the individuals studied, are patients with a solitary abscess. The most common causes of a splenic abscess of this type are intravenous drug abuse, notably heroin, and extension into the organ from an extra-splenic focus of infection. The second group consists of patients with multiple small abscesses of the spleen. These individuals comprise the remaining two thirds of those patients with splenic abscess and have a much poorer prognosis, usually suffering from generalized septicemia or from severe impairment of their immunologic defense systems. Infection, particularly bacterial endocarditis, can result in either a large solitary abscess or multiple small ones.

Different etiologic factors have been discussed in published reports, with subsequent attempts at their clarification. Splenic infarct predisposes to

splenic abscess, and bacterial endocarditis is probably the most frequent cause of splenic infarct. Another common cause is the hemoglobinopathies, most notably the sickling trait (HbSC).² Sickle cell anemia (HbSS) leading to splenic abscess has been reported in the literature.³ However, a recent study¹⁰ showed 75% of splenic abscesses to be secondary to hematogenous spread in infection; 15% are caused by traumatic incidents and 10% by intrinsic pathologic processes, such as carcinoma originating in the stomach or colon. Several instances of idiopathic splenic abscess also have been reported,^{1,2} as well as one patient⁶ in whom the abscess developed one year after roux-en-Y pancreaticojejunostomy.

Organisms isolated from abscesses caused by infection have included all known pyogenic bacteria except gonococcus.⁷ Predominating organisms have varied over the decades; whereas typhoid was the most frequent cause of splenic abscesses early in this century, with malaria the second most frequent,⁵ the last 15 years have seen an increase in the gram-negative bacilli, especially *Escherichia coli* and nontyphoidal salmonella.² In addition to bacteria, there have been two recent cases in which *Entamoeba histolytica* was isolated from the abscess,^{10,11} and one in which a three-year-old girl with promyelocytic leukemia developed multiple monilial abscesses in the spleen.¹ Many foci of infection² have been observed to contribute to splenic abscess, including otitis media, parotitis, empyema, appendicitis, cutaneous infections, and osteomyelitis.

Diagnosis

A rather non-specific triad for diagnosis recently has been proposed⁷: pyrexia, leukocytosis, and

*From the Department of Surgery, the University of Louisville School of Medicine, Health Sciences Center, Louisville, Kentucky 40201.

the presence of a mass (splenomegaly) and/or tenderness in the left upper quadrant. A fairly consistent finding, in over 80% of patients in one study,⁷ is pain in the left upper quadrant. Approximately one-third of the patients in that study also presented with referred pain to the left shoulder. Other investigators described a friction rub when the spleen is auscultated,^{2,5} gastrointestinal symptoms such as nausea and vomiting, and edema and erythema of the skin in the left upper quadrant, especially if the spleen has become adherent to the abdominal wall.⁶

Several radiologic features usually are present in patients later found to have splenic abscess. An immobile, elevated left hemidiaphragm often associated with a left pleural effusion has been reported,^{2,5,9} as well as displacement of abdominal viscera, including the stomach, the splenic flexure of the colon, and the left kidney. The presence of a gas pattern in the spleen is also considered pathognomonic of a splenic abscess.⁹

An abnormal spleen scan may indicate splenic abscess,^{5,11} although a patient with splenic abscess is described in whom the standard technetium 99m scan was interpreted as normal.⁴ The scan registers the abscess as a negative defect and is reportedly reliable for areas larger than 5 cm in diameter. The gallium total body scan is discouraged by some investigators² who say that visualization of even a large abscess may be difficult because uptake of the radioisotope by an abscess and by normal splenic tissue may not differ sufficiently. Gallium scan, however, did disclose the splenic abscess in the patient mentioned above in whom technetium scan was considered normal.⁵ Ultrasound may also be of some use. The possibilities of computerized axial tomography have yet to be explored.¹

Selective arteriography is said to be even more reliable than the technetium 99m scan. Two different angiographic patterns for splenic abscesses have been noted.^{1,8} In one, the abscess mimics a subcapsular hematoma, with tortuous arteries on the periphery of a vascular mass, collateral veins, and a narrowed or obstructed splenic vein. The other pattern shows splenomegaly, with the spleen containing an irregular mass that has ill-defined margins, no vascular rim, a normal vein pattern, and stretched vessels without arterial encasement.

Failure to identify a splenic abscess had occurred even when exploratory laparotomy was done for diagnostic purposes.² With this in mind,

one can understand why antemortem diagnosis continues to be so difficult.

Treatment

Treatment for splenic abscesses consists of splenectomy with liberal drainage of the splenic bed, followed by a long postoperative course of antibiotics. A transabdominal operative approach is favored to allow minimal exploration of the subdiaphragmatic space and early control of the splenic pedicle. Delayed primary closure is recommended⁹ because of the high incidence of wound infection, with the skin and subcutaneous tissues left open during the postoperative period. Antibiotic therapy before splenectomy has all but been abandoned, as antibiotics may mask symptoms until the spleen ruptures. However, in one reported case a postpartum woman with amebic abscesses in the liver and spleen was treated only with metronidazole and emetine and she recovered. The danger of rupture is ever present, with the contents of the abscess spilling into the colon, stomach,⁹ and peritoneal and pleural cavities. Other reported complications of inadequate or no treatment included colonic obstruction at the splenic flexure,⁶ a draining splenic-cutaneous fistula,⁷ cholecystitis, and pylephlebitis.⁹

Outcome depends on early diagnosis and operation, coupled with control of the underlying cause of the abscess. Inability to control the primary focus of infection was the leading cause of death in recent studies.⁵

Case Reports

Patient 1. A 46-year-old man addicted to heroin presented at Louisville General Hospital on September 13, 1976, complaining of chills, fever, loss of appetite, cough, headache, myalgia, pain in the right chest, and diarrhea, with a 25-pound weight loss over the previous 3-4 weeks. The patient had had many recent hospital admissions for cellulitis secondary to intravenous drug use. His temperature was 104 F. and his pulse, 140. He had rales in the right lower lobe of the chest, and a liver edge was palpable 5 cm below the right costal margin. Hemoglobin was 12.7 gm%; white cell count was 41,000. Chest x-ray examination disclosed right lower lobe infiltrate. Sputum cultures showed gram-positive diplococci.

The patient was placed on intravenous penicillin. Staphylococcus septicemia was suspected and his antibiotic was changed to nafcillin. Over the

next few days the patient developed abdominal pain on palpation and a left lower lobe effusion. On September 28 a holosystolic heart murmur was heard, most clearly at the apex. Echocardiogram displayed an abnormality consistent with a small vegetation on the mitral valve. A liver-spleen scan demonstrated a splenic defect. A gallium scan was read as normal. On October 1 the chest drainage disclosed empyema that was positive for *Enterobacter*. Gentamicin was added to his therapy. The patient seemed to be progressing well until October 12 when he developed a hypotensive episode and his temperature spiked to 104 F. He was started on Amiken.

At exploratory laparotomy six days later a large splenic abscess was found extending onto the liver surface. In dissecting the spleen, the contents of the abscess were spilled into the cavity. A sump drain was passed into the left upper quadrant and several penrose drains were placed over the pancreas, which was not involved. The abdomen was irrigated following culture of the abscess fluid which was positive for *Enterobacter* organisms.

Postoperatively, the patient made good progress. Although he developed pneumonia of the right middle lobe of the lung, this responded to therapy, and he was discharged home to be followed by the cardiology department.

Comment. This patient presented with several problems that all have rather complex interrelationships. First, the patient was a heroin addict, which placed him initially in a group with increased risk of splenic abscesses. Also, he had a focus of infection (pneumonia) which increased the risk of blood-borne infection to the spleen. Moreover, during hospitalization he developed endocarditis, the most frequent cause of splenic infarcts.^{5,7} Splenic infarcts usually become infected during episodes of bacteremia to yield splenic abscesses.⁹ He developed empyema of the lung which was positive for *Enterobacter*, as was the culture from his abscess. The empyema in the lung could have been stimulus enough for seeding the compromised infarcted area of the spleen to form a splenic abscess. However, the possibility also exists that the abscess was a result of simple spread of infection from the lung to the spleen without infarction.

Diagnosis in the present patient illustrates some aspects of the controversy over the use of scanning techniques to evaluate the spleen. The liver-spleen scan showed a defect in the spleen; the

gallium scan did not. This demonstrates the difficulty in discriminating between the uptake of radioisotope by an abscess and by normal splenic tissue. Perhaps ultrasound would have proved valuable in this instance.

Patient 2. A 47-year-old woman was admitted in October 1976 with a one-month history of left upper quadrant pain of sudden onset. Pain was aggravated by deep breathing, coughing, and lying down. She had some shortness of breath and had had fever without chills along with watery diarrhea for four to five days. The fever then subsided, and the pain decreased somewhat for two weeks. One week before admission the abdominal pain and fever returned, again with no chills, and ranged from 100 to 103 F.

Blood cultured on admission was sterile. Urine cultures showed a growth of 100,000 colonies of *Escherichia coli*. Physical examination disclosed a tender abdomen and decreased breath sounds over the left lower chest. Hemoglobin was 11 gm and white blood count, 9,300. Radiologic studies including upper gastrointestinal (GI) series, barium enema, intravenous pyelogram (IVP), and gallbladder series were normal. X-ray examination of the chest showed an elevated left hemidiaphragm, with blunting of the left costovertebral angle. A lung scan showed clear lungs and elevated diaphragm on the left. Fluoroscopy on November 1 showed normal findings except an abnormal left upper quadrant density displacing the stomach and a small air bubble in the region of the spleen. The liver-spleen scan with technetium 99m demonstrated a large defect in the spleen as did ultrasound. The defect was thought to be cystic in nature and the spleen displaced. Complete upper GI series showed the fungus of the stomach to be displaced.

Transabdominal incision disclosed a large splenic abscess in a large "boggy" spleen. The mass and a foul odor suggested the presence of anaerobic organisms. No associated organs were involved, and the spleen was removed without difficulty. Drainage tubes were placed appropriately, and delayed primary closure was carried out. Cultures taken from the abscess showed the organism to be *Escherichia coli*. Postoperatively the patient was treated with chloramphenicol and gentamicin. The patient did well and was discharged home with instructions to return to the clinic for follow-up.

Comment. The recent history of abdominal pain, shortness of breath, and fever could suggest

a transient episode of pyelonephritis, especially because the recurrence three weeks later disclosed significant *Escherichia coli* in the urinary tract. Acute pyelonephritis may develop over a matter of hours, and the manifestations of a mild case usually subside within days even without specific antibiotic therapy. Most patients recover completely, but in a considerable proportion of patients attacks recur at irregular intervals. Although clinical manifestations of a mild case usually disappear, the subclinical findings are often present. In this patient, the spleen may have become seeded with organisms during one or both of these attacks, and the resulting symptoms of a splenic abscess may have been partially masked by the antibiotic therapy for urinary tract infection. A normal IVP did not rule out the possibility of pyelonephritis.

The course of this patient's illness illustrates some of the classic findings of splenic abscess: 1) an immobile elevated left hemidiaphragm, 2) fluoroscopic evidence of left upper quadrant density displacing the stomach, 3) an air bubble in the area of the spleen, 4) cystic defect on ultrasound, 5) upper quadrant pain, and 6) liver-spleen defect on scanning.

Discussion

The extremely high mortality rate associated with splenic abscess could be lowered substantially by increased awareness of its possibility and better utilization of the modern diagnostic methods. This would lead to earlier operative and better postoperative control with appropriate antibiotics. Physicians must be even more diligent with their trauma patients as well as with infectious patients, especially those having endocarditis and infections associated with drug abuse, not to overlook the possibility of splenic abscess. Review of reports of splenic abscess indicates physical examinations and lab findings alone are generally of little value to the clinician. The patients described herein are prime instances in which not looking at the "total picture" threatens the patient's survival.

The most promising techniques in diagnosis of splenic abscess are scanning and ultrasound and the use of selective arteriography in more puzzling cases. Splenectomy followed by drainage, delayed primary skin closure, and several weeks of appropriate antibiotic therapy postoperatively comprise the treatment of choice in dealing with splenic abscesses. Without operation mortality

from splenic abscesses was almost 100%; but with operation and adequate postoperative care mortality has been lowered to as little as 7%.

LORETTA J. RICE
RICHARD ROSENSTEIN
NANCY C. SWIKERT
HUGH C. WILLIAMS

References

1. Abu-Dallo, K.I., Manny, Y., Penchas, S., and Eyal, Z.: Clinical manifestations of splenic abscess. *Arch. Surg.* 110: 281, 1975.
2. Chulay, J.D., and Lankerani, M.R.: Splenic abscess. Report of 10 cases and review of the literature. *Am. J. Med.* 61:513, 1976.
3. Cockshott, W.P., and Weaver, E.J.M.: Primary tropical splenic abscess: A misnomer. *Br. J. Surg.* 49:665, 1962.
4. Coopersmith, A., Ritchey, A.K., and Zinkham, W.H.: Fever of unknown origin and the value of gallium-67 and technetium-99m for defining abnormality of the spleen: A case report. *Hopkins Med. J.* 137:51, 1975.
5. Gadacz, T., Way, L.W., and Dunphy, J.E.: Changing clinical spectrum of splenic abscess. *Am. J. Surg.* 128:182, 1974.
6. Graham, S.D., Jr., and Golden, G.T.: Splenic abscess. *Va. Med. Monthly* 101:958, 1974.
7. Lawhorne, T.W., Jr., and Zuidema, G.D.: Splenic abscess. *Surgery* 79:686, 1976.
8. Miller, F.J., Jr., Rothermel, F.J., O'Neil, M.J., and Shochat, S.J.: Clinical and roentgenographic findings in splenic abscess. *Arch. Surg.* 111:1156, 1976.
9. Pickleman, J.R., Paloyan, E., and Block, G.E.: The surgical significance of splenic abscess. *Surgery* 68:287, 1970.
10. Sengupta, D., and Mukherjee, B.: Amoebic abscess of the spleen. *J. Indian M. A.* 64:45, 1975.
11. Wagner, V.P., Smale, L.E., and Lischke, J.H.: Amebic abscess of the liver and spleen in pregnancy and the puerperium. *Obstet. Gynecol.* 45:562, 1975.

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EDITORIAL

Maybe Somebody Out There Is Listening

At 7:30 in the morning on the second Monday of every month your editors gather together over coffee in a styrofoam cup and try to compose the format for the next month's *Journal*. We sift through six to ten articles that are to be reviewed and decide which ones will meet with the most approval and furnish information to our 3100 readers across the state. Admittedly, it is very hard for six "city" doctors to know exactly what type of articles and reviews will meet with the most success, and we are frank to admit that our criteria for accepting or rejecting an article are not always the same. Likewise rare is it that we are unanimous in our agreement of what to publish.

With these overhanging doubts it would be quite natural for us to wonder what kind of job we are doing and if we really do serve the needs of our readers. It was from this wonderment that

the publishers and the editors decided to conduct a random survey to get some of the expressed views of our doctor readers. By doing this we had hoped to avoid the pit of complacency and to stay off the lofty towers of smugness.

Well, back from the survey came your answers. The first thing we noticed was that an astounding number of you responded to our plea. The results of the questionnaire are found elsewhere in this *Journal*. It looks from what you said that while we do not have a total testimonial of a fine job, at least we were not buried in mounds of criticism and fault finding.

Please remember, we stand only to serve and we serve only at your pleasure. We indeed need your comments and criticism and, believe me, if your request is only a lone voice in the wilderness, it will not go unheeded.

MFH

1977 KMA Annual Meeting

September 27-29

Don't Miss

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- The Meetings of the House of Delegates
- The Outstanding Scientific and Technical Exhibits
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See *Annual Meeting Details* Pages 385-402

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Journal Reader's Survey

"I would like to see more practical scientific and clinical papers."

"Don't try to be a scientific journal—concentrate on socio-political problems."

"Continue its present course."

"Cease publication."

For the first time in 12 years, the Editorial Board of *The Journal of KMA* conducted a survey relative to the contents of *The Journal*. It did not involve the entire membership, but 500 physicians were randomly selected or polling. The survey was undertaken to determine whether the membership felt the publication was beneficial and to request suggestions on changes. It was hoped that many new ideas would be gained from the survey.

Of the 500 physicians polled, 270 (54%) replied to the survey. This response is excellent since similar surveys done by the Texas and Michigan medical journals received only a 35-40% return.

The questions asked the physicians, their replies, and our comments on the results are as follows:

| Do you feel <i>The Journal</i> is worthwhile and should be continued? | | |
|---|-----|---------|
| YES | 198 | (73.3%) |
| NO | 61 | (22.5%) |
| No Answer | 11 | (4.2%) |

Three out of four physicians polled felt *The Journal* is worthwhile and they have made numerous suggestions for topics, new articles and sections. Although less than one-fourth felt that *The Journal* should be discontinued, it is important to review their reasons for suggesting the cancellation of this publication. Constructive criticism is just as essential for maintaining a high publishing standard as is praise and support. The most prevalent comment among the negative responses was changing *The Journal* to a newsletter. Whereas a newsletter is basically a condensed factual account of a variety of topics, it has many shortcomings. To disseminate the information that goes in *The Journal* into a newsletter format would require at least 20 pages and would exclude the scientific and clinical articles the majority of the polled physicians find interesting. The newsletter gives quick, brief facts on a subject with *The Journal* giving detailed accounts, both of which are essential in keeping the membership informed.

| How would you rate <i>The Journal</i> ? | | |
|---|-----|---------|
| Excellent | 41 | (15.2%) |
| *Good | 10 | (3.8%) |
| Fair | 162 | (61.5%) |
| Poor | 42 | (15.5%) |
| No Answer | 11 | (4.0%) |

Considering the publications *The Journal* must compete with, 61.5 to 80.5% rating is very good. The fact that 65.5% (less than one-sixth) rated the publication poor prompts the Editorial Board to provide a higher quality of informative articles through stricter editing and selection. (*The good rating was not originally on the survey, at several of those polled wrote this in.)

| Do you read <i>The Journal</i> ? | | |
|----------------------------------|-----|---------|
| Regularly | 145 | (53.3%) |
| Occasionally | 110 | (42.7%) |
| Never | 8 | (3.0%) |
| No Answer | 3 | (1.0%) |

Here the figures speak for themselves! *The Journal* is read at least periodically by 96% of those members responding. The Board understands that there are times when the articles in *The Journal* will not be of interest to all the readers.

| Which of these topics would you like to see more of in <i>The Journal</i> ? | | |
|---|-----|---------|
| Scientific and clinical | 162 | (61.4%) |
| Socio-Economic | 68 | (25.8%) |
| Research | 19 | (7.2%) |
| Specialized Interest | 42 | (15.9%) |
| No Answer | 42 | (15.9%) |

At a time when many local and state medical association publications are becoming socio-economically oriented, the majority of Kentucky physicians favor scientific and clinical emphasis. The addition of an Assistant Scientific Editor and stricter editing of articles for publication will upgrade the quality of the content of *The Journal*. The Board reviews 40 to 50 scientific articles each year and almost 60% of these will be published, some after extensive editing and revision.

| The sections read most often in <i>The Journal</i> are: | |
|---|---------|
| Scientific | (68.6%) |
| Editorials | (56.1%) |
| President's Page | (50.0%) |
| Grand Rounds | (47.0%) |
| Associational News | (45.1%) |

The survey requested suggestions for changes and additions to *The Journal*. Although too numerous to list in this article, some of the comments, in addition to those at the beginning of the article, are:

"The reporting of more medical news and progress of Kentucky medicine; more in-depth analysis of state and federal legislation; special critiques and reviews of symposia held by specialty groups; more socio-economic data; more photographic news coverage; and more clinical case reviews.

The Journal Editorial Board wishes to express appreciation to those physicians who took time to answer the survey. Reader support and suggestions for improvement are essential for *The Journal* to continue to be an informative and beneficial publication. We hope you will continue in this endeavor.



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For prescribing, see complete prescribing information in the package insert, or in PDR, or write from your Pennwalt representative. The following is a brief summary. **Indications:** Zaroxolyn (metolazone) is an antihypertensive indicated for the management of mild to moderate essential hypertension as sole therapy and in the more severe forms of hypertension in conjunction with other antihypertensive agents. Also, edema associated with heart failure and renal disease. **Contraindications:** Anuria, hepatic coma or precoma, allergy or sensitivity to Zaroxolyn. Or, as a routine in other healthy pregnant women. **Warnings:** In patients with cross-allergy may occur in patients sensitive to sulfonamide-derived drugs, thiazides, or methazone. Hypokalemia may occur, and is a potential hazard in digitalized patients. Serious or fatal arrhythmias may occur. Anuria and hyperuricemia may be noted or aggravated. Considerable potentiation may occur when given concurrently with furosemide. Use the dosage of the other agents should be reduced. Use with potassium-sparing diuretics may increase potassium retention and hyperkalemia. Administration to women of childbearing

age requires that potential benefits be weighed against possible hazards to the fetus. Zaroxolyn appears in the breast milk. Not for pediatric use.

Precautions: Perform periodic examination of serum electrolytes, BUN, uric acid, and glucose. Observe patients for signs of fluid or electrolyte imbalance. These determinations are particularly important when there is excessive vomiting or diarrhea, or when parenteral fluids are administered. Patients treated with diuretics or corticosteroids are susceptible to potassium depletion. Caution should be observed when administering to patients with gout or hyperuricemia or those with severely impaired renal function. Hyperglycemia and glycosuria may occur in latent diabetes. Chloride deficit and hypochloremic alkalosis may occur. Orthostatic hypotension may occur. Dilutional hyponatremia may occur in edematous patients in hot weather.

Adverse Reactions: Constipation, nausea, vomiting, anorexia, diarrhea, bloating, epigastric distress, intrahepatic cholestatic jaundice, hepatitis, syncope, dizziness, drowsiness, vertigo, headache, orthostatic hypotension, excessive volume depletion, hemoconcentration, venous thrombosis, palpitation, chest pain, leukopenia, urticaria, other skin rashes, dryness of mouth,

hypokalemia, hyponatremia, hypochloremia, hypochloremic alkalosis, hyperuricemia, hyperglycemia, glycosuria, raised BUN or creatinine, fatigue, muscle cramps or spasm, weakness, restlessness, chills, and acute gouty attacks. **Usual Initial Once-Daily Dosages:** mild to moderate essential hypertension—2½ to 5 mg, edema of cardiac failure—5 to 10 mg, edema of renal disease—5 to 20 mg. Dosage adjustment may be necessary during the course of therapy. **How Supplied:** Tablets, 2½, 5 and 10 mg

References:

- 1 Dornfeld L, Kane R. Metolazone in essential hypertension. The long-term clinical efficacy of a new diuretic. *Curr Ther Res* 18: 527-533, 1975
- 2 Data on file, Medical Department, Pennwalt Prescription Products

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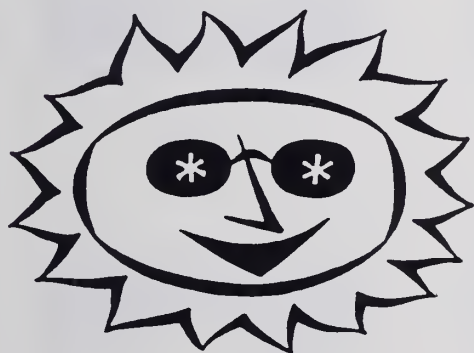
Ray D. Jones
Associate

1977 Annual Meeting Section

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KMA Officers

1976-1977



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John M. Baird, M.D.
Vice-President



Carl Cooper, Jr., M.D.
Speaker of the House



S. Randolph Scheen, M.D.
Secretary-Treasurer

PRESIDENT-ELECT

John P. Stewart, M.D.

Frankfort

John P. Stewart, M.D., will be installed as President of the Kentucky Medical Association at the President's Luncheon on Wednesday, September 28.

A radiologist, Doctor Stewart received his medical degree from the University of Pennsylvania in 1952 and served his internship and residency at the University of Michigan. He currently is in practice at King's Daughters Memorial Hospital where he has previously served as Chief of Staff and Chairman of the Board of Trustees.

Always interested in the affairs of the Association, Doctor Stewart was elected Trustee from the Seventh District in 1973 and was named Board Chairman in 1975. His deep involvement in legislative matters is apparent as he is a past Chairman of the State Legislative Activities Committee and currently serves as Chairman

of the Committee on National Legislative Activities. In addition he is a member of many other Associational committees including Scientific Program, State Legislative Activities, Budget, and Ad Hoc on Professional Liability Insurance.

Doctor Stewart maintains his interest in his specialty through his membership in the American Board of Radiology and the American College of Radiology. He is also a former member of the KEMPAC Board of Directors and served as President of the Franklin County Medical Society for two terms.

Following in the medical tradition of his father and grandfather, both physicians, Doctor Stewart will be installed as KMA President 83 years after his grandfather, John Quincy Adams Stewart, served in that position.

VICE-PRESIDENT

John M. Baird, M.D., Danville

Serving his second term as KMA Vice-President, Doctor Baird, a family physician, has been active on many committees of the Association this past year. He is a member of the Committee on Medicare and Other Governmental Medical Programs and the Ad Hoc Committee to Study the Report of the Council on Public Higher Education and is a past Chairman of the Scientific Exhibits Committee.

A 1953 graduate of the University of Louisville School of Medicine, Doctor Baird serves as Vice-President of the Ephraim McDowell Memorial Hospital in Danville and is Medical Director of the McDowell Home Health Agency and the Boyle County Family Planning Clinic.

Doctor Baird, who is active in civic affairs in his community, has held offices in the Kiwanis Club and the Junior Chamber of Commerce. He is a Trustee of Oneida Institute and is active in the Lexington Avenue Baptist Church.

In addition to the AMA and KMA, he is a member of the Kentucky Chapter and American Academy of Family Physicians.

SECRETARY-TREASURER

S. Randolph Scheen, M.D., Louisville

Doctor Scheen was KMA Secretary for eight years prior to his election as Secretary-Treasurer in 1975. A dermatologist, he is a graduate of the University of Louisville and University of Minnesota medical schools. Continually active in the affairs of the Association on an almost daily basis, he is a member of the Budget Committee, Judicial Council, and the Ad Hoc Committee on the Overview of KMA Peer Review Activities.

Doctor Scheen regularly participates on local television and radio programs answering questions from the public on dermatology. He belongs to the American Academy of Dermatology and the Alumni Foundation of the Mayo Clinic.

SPEAKER OF THE HOUSE

Carl Cooper, Jr., M.D., Bedford

Serving his third year as House Speaker, Doctor Cooper has held several offices in KMA including Vice-Speaker, Vice-President, and Alternate Delegate to AMA. He is currently Chairman of the Committee on State Legislative Activities and is a member of the National Legislative Activities Committee and the Ad Hoc Committee on Professional Liability Insurance. A 1952 graduate of the University of Louisville, Doctor Cooper is a former KEMPAC Board Chairman and is a Fellow of the American Academy of Family Physicians.

VICE-SPEAKER OF THE HOUSE

Bennett L. Crowder, II, M.D., Hopkinsville

Doctor Crowder, chosen last year to serve an unexpired term of one year as Vice-Speaker, is also Parliamentarian for the Association. A general and thoracic surgeon, he is a 1961 graduate of the University of Tennessee and currently is the Director of the Pennyrite Emergency Medical Services. Active in organized medicine, he serves on the Constitution and Bylaws Committee and is Secretary of the KEMPAC Board. A Fellow of the American College of Surgeons, Doctor Crowder is extremely active in numerous civic organizations, to include the Jaycees, Rotary Club, and Chamber of Commerce.

AMA Delegates

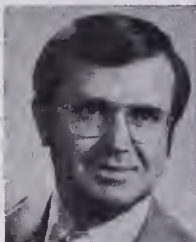
David B. Stevens, M.D., Lexington

Doctor Stevens is the Senior Delegate to AMA from Kentucky, having served since 1965 as a Delegate or Alternate Delegate. An orthopedic surgeon, he has been active in the field of cults both at the state and national level. Doctor Stevens is a 1955 graduate of Northwestern University and is an Assistant Clinical Professor at the University of Kentucky. A Past President of the Fayette County Medical Society and the Kentucky Orthopaedic Society, Doctor Stevens has recently done medical work in Central America.



Fred C. Rainey, M.D., Elizabethtown

A Past President of KMA, Doctor Rainey was elected as AMA Delegate in 1974, having previously served as Alternate Delegate. His deep involvement in KMA activities includes membership on both state and national legislative committees and chairmanship of the Awards Committee and Technical Advisory Committee on Physician Services. A past Board Chairman of KEMPAC, Doctor Rainey is a 1955 graduate of the University of Tennessee and is a family physician, belonging to the KAFP and AAFP. He is also a former Vice-President of the U.S. Jaycees.



Harold D. Haller, Sr., M.D., Louisville

Doctor Haller, elected as AMA Delegate in 1976, has been an active participant in the affairs of organized medicine for several years. He is the current President of the Kentucky Chapter, American Academy of Family Physicians and has worked in numerous capacities in that organization. Serving on several committees of KMA this year, to include the Committee on Maternal and Child Health and the Committee on Health Care Costs, Doctor Haller is a 1963 graduate of Bowman Gray Medical School.



Journal Editors

EDITOR

John S. Llewellyn, M.D., Louisville

Having served on the Editorial Board of *The Journal* since 1974, Doctor Llewellyn is a former Trustee from the Fifth District (1969-1972). A Professor of Clinical

Medicine at the University of Louisville School of Medicine, Doctor Llewellyn graduated from Loyola University Stritch School of Medicine in 1940. A Fellow of the American College of Physicians, he belongs to the American Heart Association, American Diabetes Association, and American Society of Internal Medicine. He is also a member of the Louisville Chamber of Commerce and serves on the KMA Interspecialty Council, representing the Kentucky Chapter, ACP.

A. Evan Overstreet, M.D., Louisville

Doctor Overstreet is in his sixth year on the Editorial Board of *The Journal*, having served as Assistant Editor until his appointment as Associate Editor this year. A 1955 graduate of the University of Louisville School of Medicine, Doctor Overstreet is an internist. He is a member of the American Society of Internal Medicine, the American College of Physicians, and the Transylvania Medical Society.

Milton F. Miller, M.D., Louisville

Serving his first year as Assistant Editor of *The Journal* Doctor Miller is Associate Clinical Professor of Medicine at the University of Louisville of which he is a 1954 graduate. An internist, Doctor Miller serves on the Membership Committee of the Jefferson County Medical Society.

G. Randolph Schrodtt, M.D., Louisville

Doctor Schrodtt, appointed as Assistant Editor in 1974, is Professor and Chairman of the Department of Pathology at the University of Louisville School of Medicine. Also a 1954 graduate of U of L, he is a member of the American Society of Clinical Pathologists and the International Academy of Pathology.

David L. Stewart, M.D., Louisville

Appointed as Assistant Editor this year, Doctor Stewart is a former Editor of the Jefferson County Medical Society *Bulletin*. A 1946 graduate of the University of Louisville, he is a member of the American Psychiatric Association and is Chairman of the KMA Committee on Physicians' Health.

Other Editorial Positions

Scientific Editor

Paul C. Grider, Jr., M.D., Louisville—appointed in 1974.

Assistant Scientific Editor

Stephen Z. Smith, M.D., Louisville—appointed in 1977.

Regional Editors—appointed in 1977.

Allen E. Grimes, Jr., M.D., Lexington

William W. Hall, M.D., Owensboro

Thomas L. Heavern, Jr., M.D., Highland Heights

New Trustees

R. J. Phillips, M.D., Owensboro

Serving as Second District Trustee, Doctor Phillips graduated from the University of Louisville School of Medicine in 1948. A surgeon, he is on the active staff of Owensboro hospitals and is a member of the Kentucky Surgical Society and a Fellow of the American College of Surgeons. Active in KMA affairs, Doctor Phillips currently serves on the Committee to Study the Constitution and Bylaws.

William H. Keller, M.D., Frankfort

Doctor Keller now serves as KMA Trustee from the Seventh District. A 1961 graduate of the University of Cincinnati College of Medicine, Doctor Keller is a Fellow of the American College of Obstetricians and Gynecologists and is past Secretary-Treasurer of the Kentucky Obstetrical and Gynecological Society. He is a past President of the Franklin County Medical Society and is active in civic affairs in the Frankfort community.

Don R. Stephens, M.D., Cynthiana

A family physician, Doctor Stephens is now serving as Trustee from the Ninth District. He is a graduate of the University of Louisville School of Medicine and currently serves on the KMA Committee on Community and Rural Health. A member of the Southern Medical Association, he also belongs to the Kentucky and American Academy of Family Physicians.

Howard B. McWhorter, M.D., Ashland

Doctor McWhorter, serving as Trustee from the 13th District, is a 1946 graduate of the University of Louisville. A member of numerous medical organizations, he is a Fellow of the American College of Physicians, American College of Cardiology and American College of Chest Physicians. A past President of the Boyd County Medical Society and Kentucky Heart Association, Doctor McWhorter is Founder and Director of the Coronary Care Unit at King's Daughters' Hospital, Ashland.

15th Annual KEMPAC Seminar To Feature Gov. Bowen

Otis R. Bowen, M.D., Governor of Indiana, will be the featured speaker at the 15th Annual KEMPAC Seminar and Banquet to be held Monday, September 26, at the Bluegrass Convention Center in Louisville. The Banquet will be preceded by a reception starting at 6 p.m.

Donald C. Barton, M.D., KEMPAC Board Chairman, urges physicians to make their reservations early. Tickets, which are \$15 per person, may be purchased from any of the KEMPAC Directors or from the KEMPAC Office, 3532 Ephraim McDowell Drive, Louisville, Kentucky 40205.

OFFICIAL CALL KMA Annual Meeting

To the officers and members of the component county medical societies of the Kentucky Medical Association.

Meeting Place

The Annual Meeting of KMA will convene on Tuesday, Wednesday, and Thursday, September 27, 28, and 29, at the Bluegrass Convention Center, Louisville. The first general session will be called to order at 8:30 a.m., Tuesday.

The House of Delegates

The first regular session of the House of Delegates will convene at 9 a.m., Monday, September 26, in the Jeffersonian Room of Ramada Inn. The second regular business session will begin at 6 p.m., Wednesday, September 28, in the Banquet Area of the Bluegrass Convention Center.

Registration

The registration desk will open outside the Jeffersonian Room of Ramada Inn at 8 a.m., Monday, September 26 and at 5 p.m., Wednesday, September 28 in Bluegrass Convention Center. It will be open outside the Technical Exhibit Hall at Bluegrass Convention Center from 8 a.m. to 5 p.m., Tuesday and Wednesday, and 8 a.m. to 3:30 p.m. on Thursday.

Number To Use for Messages Is 491-1929

A Message Center will once again be set up during the 1977 KMA Annual Meeting. The phone number where you may be reached in case of an emergency or for routine messages is (502) 491-1929.

Staffed at all times during the meeting, the Message Center, which is provided for by the South Central Bell Telephone Company, will be located in the center of the Technical Exhibit Hall (Booth No. 51) at the Bluegrass Convention Center. Paging of individual physicians is not possible due to the arrangement of facilities for the meeting.

Only emergency calls will be posted on blackboards in the entrance lobby of Bluegrass Convention Center and in the Scientific Assembly Hall. All other messages will be kept on file at the Message Center until they are called for. It is requested that physicians check at the Message Center often for any messages. Other physicians can be located by leaving a message at the Center for them.

The phone number at the Headquarters Hotel, Ramada Inn, is (502) 491-4830. You may be reached during the meetings of the House of Delegates at that number. Your name will be posted on a blackboard at the front of the room when you receive a call.

You are urged to make use of the Message Center. Be sure to leave these phone numbers at your home, office and hospital.

KMA District Trustees

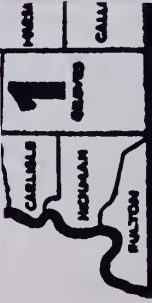
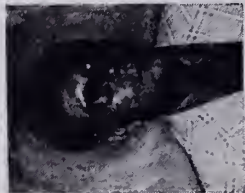
1976-77 Associational Year



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1. W. EUGENE SLOAN
Paducah

7. WILLIAM H. KELLER
Frankfort

2. R. J. PHILLIPS
Owensboro

8. RICHARD J. MENKE
Covington



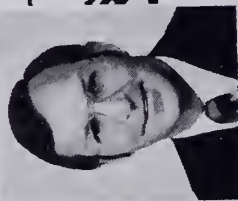
3. FRANK R. PITZER
Hopkinsville



9. DON R. STEPHENS
Cynthiana



4. CHARLES B. SPALDING
Bardstown



10. JAMES B. HOLLOWAY, JR.
Lexington

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5. CECIL L. GRUMBLES*
Louisville

11. DWIGHT L. BLACKBURN*
Berea



6. EARL P. OLIVER
Scottsville

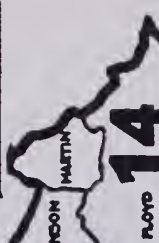


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Somerset

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Barktonville

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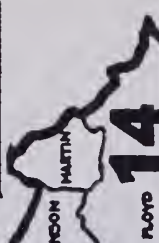
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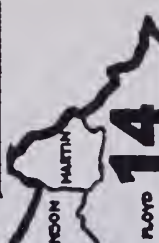
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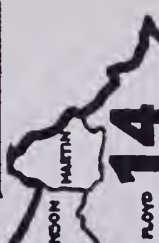
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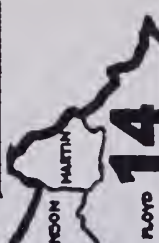
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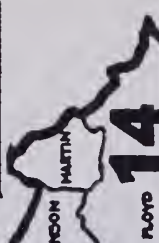
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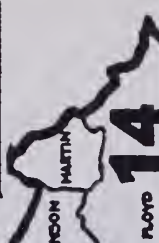
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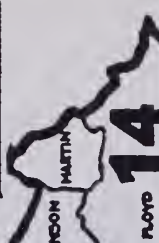
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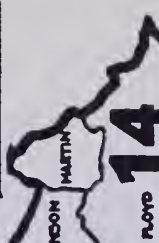
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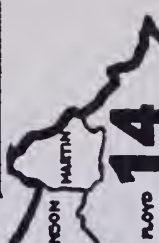
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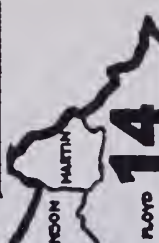
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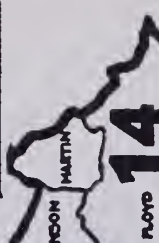
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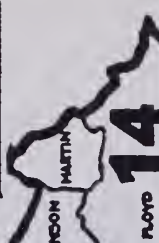
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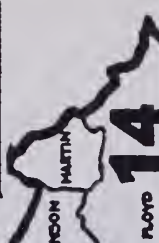
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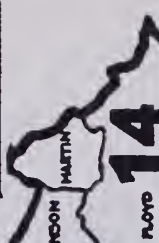
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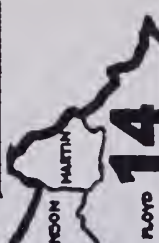
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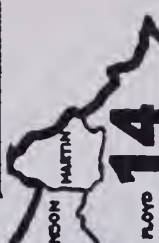
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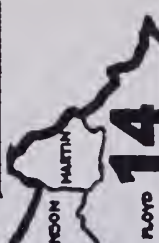
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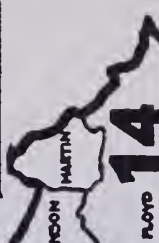
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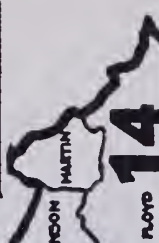
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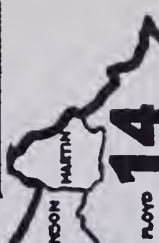
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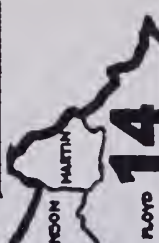
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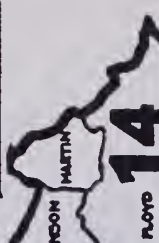
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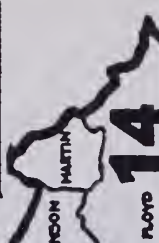
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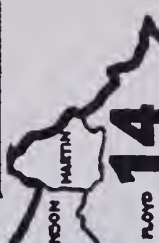
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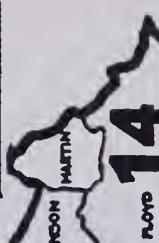
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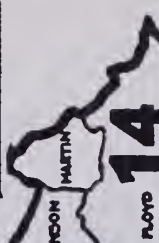
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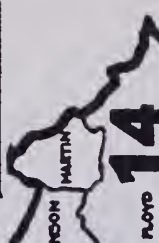
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KMA DELEGATES

ADAIR

James C. Salato, Columbia

ALLEN

Earl P. Oliver, Scottsville

ANDERSON

H. Boyd Caudill, Lawrenceburg

BALLARD

BARREN

Howard L. Edgin, Glasgow

BATH

BELL

J. B. LeSage, Middlesboro

Emanuel H. Rader, Pineville

BOONE

William M. Waller, Walton

BOURBON

James E. Ferrell, Paris

BOYD

Wiley E. Kozee, Ashland

James E. Moore, Ashland

Okey H. Sanford, Jr., Ashland

BOYLE

BRACKEN

James M. Stevenson, Brooksville

BREATHITT

E. C. Turner, Jackson

BRECKINRIDGE

James G. Sills, Hardinsburg

BULLITT

BUTLER

CALLOWAY

R. Gary Marquardt, Murray

CAMPBELL-KENTON

Paul H. Klingenberg, Covington

William B. Monnig, Erlanger

Fred A. Stine, Highland Heights

Jerry C. Sutkamp, Bellevue

Raymond J. Timmerman, Ft. Thomas

CARLISLE

CARROLL

Cecil D. Martin, Carrollton

CARTER

CASEY

Lewis E. Wesley, Liberty

CLARK

CLAY

W. E. Becknell, Manchester

CLINTON

Floyd B. Hay, Albany

CRITTENDEN

CUMBERLAND

Joseph Schickel, Burkesville

DAVIESS

James A. Baumgarten, Owensboro

Albert H. Joslin, Owensboro

William E. Pearson, Owensboro

Donald R. Neel, Owensboro

EDMONSON

ELLIOTT

ESTILL

FAYETTE

Harry L. Bailey, Lexington

Leslie W. Blakey, Lexington

Peter P. Bosomworth, Lexington

Walter R. Brewer, Lexington

Thomson R. Bryant, Jr., Lexington

P. Raphael Caffrey, Lexington

Melvin L. Dean, Lexington

Marcus L. Dillon, Jr., Lexington

Glenn U. Dorroh, Lexington

Ward O. Griffen, Jr., Lexington

Allen E. Grimes, Jr., Lexington

Walter D. Harris, Lexington

C. Nicholas Kavanaugh, Lexington

Edwin J. Nighbert, Lexington

John M. Stoeckinger, Lexington

John E. Trevey, Lexington

FLEMING

Robert W. Fidler, Flemingsburg

FLOYD

W. Grady Stumbo, Prestonsburg

FRANKLIN

Carl E. Shroat, Frankfort

Branham B. Baughman, Frankfort

FULTON

GALLATIN

GARRARD

O. S. Playforth, Lancaster

GRANT

GRAVES

C. Douglas LeNeave, Mayfield

GRAYSON

V. F. Duvall, Clarkson

GREEN

Robert P. Simmons, Greensburg

GREENUP

HANCOCK

HARDIN

Marshall R. Johnson, Elizabethtown

HARLAN

Paul M. Walstad, Harlan

Phillip Begley, Harlan

HARRISON

Joe A. Nichols, Cynthia

HART

James P. Crews, Cave City

HENDERSON

HICKMAN

C. J. Mills, Clinton

HOPKINS

Wallace R. Alexander, Madisonville

James G. Gulley, Madisonville

JACKSON

Philip R. Curd, McKee

JEFFERSON

W. Stephen Aaron, Louisville

Robert E. Arnold, Louisville

Joseph C. Babey, Louisville

James G. Baker, Louisville

David H. Bizot, Louisville

Glenn W. Bryant, Louisville

John L. Bunting, Louisville

William C. Buschemeyer, Jr.,

Louisville

Peter C. Campbell, Jr., Louisville

E. Dean Canan, Louisville

Ronald G. Chism, Louisville

Clinton C. Cook, III, Louisville

James W. Curry, Louisville

Michael B. Flynn, Louisville

Henry D. Garretson, Louisville

Laman A. Gray, Jr., Louisville

John J. Guarnaschelli, Louisville

Harold D. Haller, Louisville

Terry W. Henkel, Louisville

Lonnie W. Howerton, Jr., Louisville

Richard K. Jelsma, Louisville

Ferrell C. Lowrey, Jr., Louisville

Joseph C. Marshall, Jr., Louisville

Thomas M. Marshall, Louisville

James P. Moss, Louisville

Charles R. Oberst, Louisville

C. Ray Potts, Louisville

B. Frank Radmacher, Jr., Louisville

Bernard O. Rand, Louisville

Carroll H. Robie, Louisville

David C. Shipp, Louisville

Charles C. Smith, Jr., Louisville

Thomas G. Stigall, Louisville

T. Bodley Stites, Louisville

Gerald D. Temes, Louisville

Lucy B. Tyler, Louisville

Donald T. Varga, Louisville

Walter L. Wilson, Louisville

William E. Yancey, Louisville

Marvin A. Yussman, Louisville

JESSAMINE

Phyllis J. Corbitt, Wilmore

JOHNSON

Joseph H. Rapier, Jr., Prestonsburg

KNOTT

Gene T. Watts, Hindman

KNOX

Rufino Crisostomo, Jr., Barbourville

LARUE

LAUREL

LAWRENCE

LEE

Arnold L. Taulbee, Beattyville

LESLIE

W. B. Rogers Beasley, Hyden

LETCHER
Robert Cullen, Whitesburg

LEWIS

LINCOLN
Charles E. Crase, Stanford
LIVINGSTON
Stephen Burkhart, Salem

LOGAN
C. V. Dodson, Russellville

MADISON
Don E. Cloys, Richmond
Linda S. Fagan, Richmond

MAGOFFIN
Henry B. Ross, Salyersville

MARION
B. J. Baute, Lebanon

MARSHALL
Keith E. Ellis, Benton

MASON

MARTIN
Raymond D. Wells, Inez

McCRACKEN

McCREARY

McLEAN
Hugh H. Wilhite, Calhoun

MEADE

MENIFEE

MERCER

METCALFE
L. P. Emberton, Edmonton

MONROE
James E. Carter, Tompkinsville

MONTGOMERY

MORGAN
James D. Frederick, West Liberty

NELSON

NICHOLAS
W. R. Kingsolver, Carlisle

OHIO
R. E. Norsworthy, Hartford

OWEN
O. A. Cull, Owenton

OWSLEY
M. B. Gabbard, Booneville

PENDLETON
Robert L. McKenney, Falmouth

PENNYRILE MULTI-COUNTY
Caldwell: N. H. Talley, Princeton
Christian: Carl B. Caplinger, James H. Simpson, Hopkinsville
Muhlenberg: Charles F. Winkler, Central City
Todd: Larry D. Brock, Elkton
Trigg: William N. Richardson, Cadiz
Lyon: Steve Hiland, Eddyville

PERRY
Keith W. Cameron, Ary

PIKE
Max P. Jones, Pikeville

POWELL

PULASKI
Roy Biggs, Somerset

ROBERTSON

ROCKCASTLE
G. W. Griffith, Mt. Vernon

ROWAN
Charles D. Franks, Morehead
Jack L. Kiesel, Morehead

RUSSELL
James E. Monin, Jamestown

SCOTT
Gus A. Bynum, Georgetown

SHELBY-HENRY-OLDHAM

SIMPSON
J. Michael Pulliam, Franklin

SPENCER
William K. Skaggs, Taylorsville

TAYLOR
Henry F. Chambers, Campbellsville

TRIMBLE
Carl Cooper, Jr., Bedford

UNION

WARREN
John P. Blackburn, Bowling Green
John E. Downing, Bowling Green
L. Martin Wilson, Bowling Green

WASHINGTON

WAYNE
Robert B. Breeding, Monticello

WEBSTER

WHITLEY
R. D. Pitman, Williamsburg

WOLFE
Paul F. Maddox, Campton

WOODFORD
Lewis E. Wash, Lawrenceburg

Reference Committee Activity

Speaker Carl Cooper, Jr., M.D., Bedford, will assign all officers' and committees' reports and resolutions to one of six Reference Committees at the first meeting of the KMA House of Delegates at 9:00 a.m., Monday, September 26. Briefing sessions for Reference Committee Chairmen will be held at 12:30 p.m., Monday, in the Majestic Room, Bluegrass Convention Center. Any KMA member wishing to testify on any resolution or report is urged to be present for the **Reference Committee meetings** which will be held at 2 p.m., Monday, September 26 at Bluegrass Convention Center. These open sessions will last one hour in order for all who wish to speak to be heard. Following the open hearings, the Committees will go into executive sessions to study the reports, review the testimony, and write their reports to the House.

The Committees' recommendations will be presented at the final session of the House, Wednesday evening, September 28, in the Bluegrass Convention Center.

As Speaker of the House of Delegates, Doctor Cooper is in the process of finalizing appointments to the six Reference Committees, Credentials Committee, and Tellers Committee.

If your society has not yet submitted the names of your Delegate(s) to the Headquarters Office, you should do so immediately, as only those names recorded in the office can be considered for appointment to one of these important committees.

A complete listing of members who will be serving on the six Reference Committees and the location of the Reference Committee meetings will be published in the September issue of the **KMA Journal**.

Anyone desiring names of Reference Committee members prior to the September issue being published should contact the Headquarters Office.

ELECTIONS

Election of Trustees and Alternate Trustees

The House of Delegates will elect five District Trustees and six Alternate Trustees at its second regular session, Wednesday, September 28. Nominations will be made by the Delegates from the electing Districts at a meeting following the first session of the House on Monday, September 26.

The Nominating Committee will report at the close of the first scientific session on Tuesday, September 27. Further nominations may be made from the floor at the final session of the House on Wednesday evening, September 28. All nominations are considered and acted upon by the Delegates at this final session.

Districts electing Trustees for three year terms are: **FIRST DISTRICT** (incumbent, W. Eugene Sloan, M.D., Paducah); **THIRD DISTRICT** (incumbent, Frank R. Pitzer, M.D., Hopkinsville); **FOURTH DISTRICT** (incumbent, Charles B. Spalding, M.D., Bardstown); **TWELFTH DISTRICT** (incumbent, William T. Watkins, M.D., Somerset); and the **FOURTEENTH DISTRICT** (incumbent, Jerry D. Fraim, M.D., Paintsville).

Districts electing Alternate Trustees are the same as those electing Trustees. Incumbents are Keith E. Ellis, M.D., Benton (1st); Henry R. Bell, M.D., Elkton (3rd); Terrell D. Mays, M.D., Elizabethtown (4th); John M. Baird, M.D., Danville (12th); and Harvey A. Page, M.D., Pikeville (14th). In addition, an Alternate Trustee must be selected in the 11th District to serve one year of an unexpired three-year term.

Trustees and Alternates of the 3rd, 4th, 12th, and 14th Districts are eligible for re-election, while both the Trustee and Alternate Trustee from the 1st District have served two full terms and are not eligible for re-election.

House to Elect New Officers During Annual Meeting

KMA Officers for the 1977-78 Associational year will be elected by the House of Delegates at the close of its final session, Wednesday evening, September 28. Officers to be elected from the state at large are as follows:

| | Term |
|----------------------------------|-------------|
| President-Elect | One Year |
| Vice President | One Year |
| Speaker, House of Delegates | Three Years |
| Vice Speaker, House of Delegates | Three Years |
| Delegates to the AMA (2) | Two Years |
| *(David B. Stevens, M.D.) | |
| *(Fred C. Rainey, M.D.) | |
| Alternate Delegates | Two Years |
| *(Lee C. Hess, M.D.) | |
| *(Wally O. Montgomery, M.D.) | |
| *incumbent | |

The AMA Delegates and Alternates are to be elected for two-year terms from January 1, 1978, to December 31, 1979.

REGISTRATION INFORMATION

A registration booth will be located at the entrance to the Technical Exhibit Hall of the Bluegrass Convention Center throughout the Annual Meeting. The booth will be open at 8 a.m., Tuesday, Wednesday, and Thursday, September 27-29.

Please register and wear your badge at all times while attending the meeting.

Nominating Committee to Meet Monday, September 26

The KMA Nominating Committee will hold an open meeting at the close of the first session of the House of Delegates, Monday, September 26, in the Jeffersonian Room at Ramada Inn.

Any KMA member may confer with the Committee during this meeting. Final recommendations of the Committee will be reported at the end of the first scientific session, Tuesday morning, September 27.

Nominations may be made from the floor during the second meeting of the House of Delegates, Wednesday evening, September 28. The House will vote on the nominees at the close of this session.

Members of the Committee are as follows: William N. Richardson, M.D., Cadiz, Chairman; Walter R. Brewer, M.D., Lexington; Danny M. Clark, M.D., Somerset; Elmer H. Jackson, M.D., Danville; and Paul J. Sides, M.D., Lancaster.

MAKE YOUR RESERVATIONS NOW

It is important that you begin to make your room reservations as soon as possible for the KMA Annual Meeting, September 27-29. The Ramada Inn at I-64 and Hurstbourne Lane will be the Headquarters Hotel, however, there are several other accommodations within easy reach of Ramada Inn and the Bluegrass Convention Center. In making your reservations, remember the first House of Delegates meeting will be Monday, September 26.



Bluegrass Convention Center

Louisville, Kentucky

Ramada Inn

Annual Meeting Special Features

SCIENTIFIC SESSIONS, featuring many timely topics and nationally recognized speakers, are scheduled on September 27, 28, and 29 at the Bluegrass Convention Center, located at I-64 and Hurstbourne Lane in Louisville. "Cardiovascular Problems," "Cancer," and "Alcoholism," are themes for the four general sessions. In-depth presentations and discussion periods make the KMA Annual Meeting an outstanding vehicle for continuing medical education.

NINETEEN SPECIALTY GROUPS will hold meetings on the afternoons of September 27 and 29. Beginning at 1:30 p.m., the meetings will be held in the Bluegrass Convention Center with the exception of the Kentucky Orthopaedic Society and the Kentucky Association of Public Health Physicians which will meet in the Ramada Inn. Individual programs of the specialty societies are listed in this issue. No general sessions are scheduled for those afternoons and all KMA members are invited to attend any of the specialty group meetings.

THE PRESIDENT'S LUNCHEON will feature an entertaining presentation by Grady Nutt, "The Prime Minister of Humor." Held at 11:50 a.m., Wednesday, September 28 in the Banquet Area of the Bluegrass Convention Center, the Luncheon will also include the presentation of KMA's awards and the installation of the 1977-78 KMA President, John L. Stewart, M.D.

SCIENTIFIC AND TECHNICAL EXHIBITS will display the latest in medical products, services, and techniques at the Bluegrass Convention Center during the 1977 Annual Meeting. Members and guests are urged to take the opportunity to view products of interest at the 30-minute intermissions scheduled during each general and specialty session.

ALUMNI REUNIONS will be held again this year for ten classes of the University of Louisville School of Medicine. Information regarding these reunions may be obtained by contacting the chairman of the specific year listed elsewhere in this issue or may be picked up at the alumni booth at the Annual Meeting.

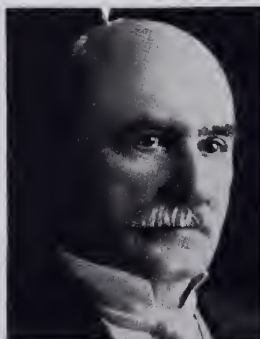
THE HOUSE OF DELEGATES, KMA's top policy-making body, will meet twice during this year's Annual Meeting. The first session of the House will be held at 9 a.m., Monday, September 26, in the Jeffersonian Room at Ramada Inn. The final session will be held in the Bluegrass Convention Center on Wednesday, September 28 at 6 p.m. (Delegates should note this is a new starting time for this final session.) Officers for the 1977-78 Associational year will be elected at the second session.

THE AUXILIARY TO KMA will hold its 55th Annual Convention, September 26-28, at the Ramada Inn. Various activities have been planned and are featured on the Auxiliary page in this *Journal*.



1977 Annual Meeting To Honor Past President McChord

The 1977 Annual Meeting of the Kentucky Medical Association will be officially titled, "The Robert C. McChord Memorial Meeting" in remembrance of the 1897 President of the Association.



Doctor McChord

The tradition of honoring a past president of KMA or some distinguished physician each year at the Annual Meeting originated in 1935.

Eugene H. Connor, M.D., Louisville, KMA Historian, has written a biography on Doctor McChord for the Annual Meeting program booklet which will be distributed

during the meeting in Louisville September 27-29.

1977 Annual Meeting Program Summary

Kentucky Medical Association

September 25, 26, 27, 28 and 29

Bluegrass Convention Center/Ramada Inn

Louisville

SUNDAY, SEPTEMBER 25

12:30 p.m. Luncheon Meeting, KMA Board of TrusteesGrand Republic Room, Convention Center

MONDAY, SEPTEMBER 26

9:00 a.m. First Meeting, KMA House of DelegatesJeffersonian Room, Ramada Inn

12:30 p.m. Luncheon, Reference Committee ChairmenMajestic Room, Convention Center

2:00 p.m. Reference Committee MeetingsIsland Queen-Idlewild Rooms, Cincinnati Room, Eclipse Room, Grand Republic Room, Delta Queen Room, Natchez Room, Convention Center

6:00 p.m. KEMPAC Reception, Banquet and SeminarBanquet Area, Convention Center

TUESDAY, SEPTEMBER 27

8:00 a.m. RegistrationLobby, Convention Center

8:50 a.m. Opening CeremoniesScientific Assembly Hall, Convention Center

9:00 a.m. First Scientific SessionScientific Assembly Hall, Convention Center

12:00 noon Luncheon Meeting, Executive Committee and Reference Committee Chairmen ..Mark Twain Room, Ramada Inn

1:30 p.m. Specialty Group Sessions, Convention Center (Nine Specialty Groups will meet simultaneously at this time. Their programs begin on page 396)

5:30 p.m. Reception Honoring John P. Stewart, M.D., and Mrs. Tom E. HallPoolside, Ramada Inn

WEDNESDAY, SEPTEMBER 28

9:00 a.m. Second Scientific SessionScientific Assembly Hall, Convention Center

11:50 a.m. President's LuncheonBanquet Area, Convention Center

2:00 p.m. Third Scientific SessionScientific Assembly Hall, Convention Center

3:00 p.m. Board of Trustees Meeting and Dinner (5 p.m.)Grand Republic Room, Convention Center

6:00 p.m. Second Meeting, KMA House of DelegatesBanquet Area, Convention Center

THURSDAY, SEPTEMBER 29

9:00 a.m. Fourth Scientific SessionScientific Assembly Hall, Convention Center

12:00 noon Luncheon Meeting, Board of TrusteesJeffersonian Room, Ramada Inn

1:30 p.m. Specialty Group Sessions, Convention Center (Ten Specialty Groups will meet simultaneously at this time. Their programs begin on page 400)

A 30-minute intermission has been scheduled during each morning
and afternoon Scientific Session for visiting
Scientific and Technical Exhibits

(Full Scientific Program begins on next page)

The Kentucky Medical Association SCIENTIFIC PROGRAM

Robert C. McChord Memorial Meeting
Bluegrass Convention Center, Louisville

TUESDAY, SEPTEMBER 27

MORNING SESSION General Session

*Paul J. Parks, M.D., Bowling Green
KMA President, Presiding*

Theme: "Cardiovascular Problems"

- 8:50 Opening Ceremonies
- 9:00 "Coronary Arteriography"
Harry L. Page, Jr., M.D., Nashville, Tenn.
- 9:25 "The Cardiac Patient Coming to Surgery—What To Do About His Drug Therapy"
John H. Tinker, M.D., Rochester, Minn.
- 9:45 "Coronary Artery Bypass"
Henry T. Bahnson, M.D., Pittsburgh, Pa.
- 10:05 Intermission to Visit Exhibits
- 10:35 "Recent Developments in Echocardiography"
Richard E. Kerber, M.D., Iowa City, Iowa
- 11:00 To Be Announced
- 11:20 "Long-term Results After Surgery for Congenital Heart Disease"
Samuel Kaplan, M.D., Cincinnati, Ohio
- 11:40 "Clinical Use of Intracardiac ECG Recording"
Philip Samet, M.D., Miami Beach, Fla.

AFTERNOON SESSION Nine Specialty Group Meetings

(Nine specialty groups will have simultaneous scientific programs beginning at 1:30 p.m. No general session will be held at this time.)

Kentucky Society of Anesthesiologists

Natchez Room

- 1:30 "Sodium Nitroprusside: Use and Toxicity—An Update"
John H. Tinker, M.D., Rochester, Minn.
- 2:30 Intermission to Visit Exhibits
- 3:00 To Be Announced
- 3:30 Business Meeting

Kentucky Chapter, American College of Chest Physicians

New Orleans-Island Queen-Idlewild Rooms

- 1:30 "Intracardiac Recording and Pacing"
Philip Samet, M.D., Miami Beach, Fla.

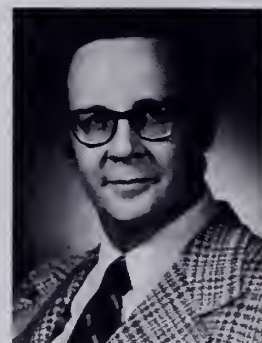
HARRY L. PAGE, JR., M.D.
Nashville, Tennessee



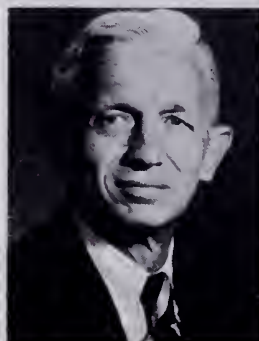
Assistant Clinical Professor of Medicine, Vanderbilt University. M.D., 1959, Vanderbilt University. Co-Director of the Division of Cardiology, St. Thomas Hospital, Nashville. Fellow, American College of Cardiology, American College of Chest Physicians, American College of Physicians. Former Vice-President, Nashville Society of Internal Medicine. Author and co-author of numerous articles on coronary artery disease.

JOHN H. TINKER, M.D.
Rochester, Minnesota

Assistant Professor of Anesthesiology, Mayo Medical School. M.D., 1968, University of Cincinnati College of Medicine. Fellow, American College of Anesthesiologists. 1975 recipient, Teacher of the Year Award, Department of Anesthesia, Mayo Clinic. Member, American Society of Anesthesiologists, Society of Neurosurgical Anesthesia and Neurologic Supportive Care, and Society of Cardiovascular Anesthesiologists.



HENRY T. BAHNSON, M.D.
Pittsburgh, Pennsylvania



Professor of Surgery and Chairman of the Department, University of Pittsburgh. M.D., 1944, Harvard Medical School. Fellow, American College of Surgeons. 1976 President, American Association for Thoracic Surgery. Past President, Society of University Surgeons. Treasurer, International Society of Surgery. Member, International Cardiovascular Society, Society of Thoracic Surgeons, Society of Clinical Surgery.

RICHARD E. KERBER, M.D.
Iowa City, Iowa



Associate Professor, University of Iowa Hospital. M.D., 1964, New York University. Fellow, American College of Cardiology (Governor for Iowa 1976-79). Fellow, American College of Physicians. Member, Board of Directors, American Society of Echocardiography. Member, American Institute of Ultrasound in Medicine, Society for Experimental Biology and Medicine. Editorial Board member, Journal of Clinical Ultrasound, Medical Ultrasound, Cardiology Digest.

SAMUEL KAPLAN, M.D.
Cincinnati, Ohio

Professor of Pediatrics and Associate Professor of Internal Medicine, University of Cincinnati College of Medicine. M.D., 1944, University of Witwatersrand Medical School, Johannesburg. Director, Division of Cardiology, Children's Hospital, Cincinnati. Fellow, American College of Chest Physicians. Member, American Pediatric Society, American College of Cardiology. Editorial Board member, American Journal of Cardiology, Journal of Electrocardiography.



PHILIP SAMET, M.D.
Miami Beach, Florida



Professor of Medicine and Associate Professor of Physiology, University of Miami School of Medicine. M.D., 1947, New York University College of Medicine. Director, Cardiac Pulmonary Laboratory and Chief, Division of Cardiology, Mt. Sinai Hospital. Fellow, American College of Cardiology. Member, American College of Physicians, American College of Chest Physicians. Editorial Board member, American Journal of Cardiology, Circulation.

RODERICK H. TURNER, M.D.
Boston, Massachusetts

Assistant Clinical Professor of Orthopedic Surgery, Tufts University School of Medicine. M.D., 1958, Indiana University School of Medicine. Senior Orthopedic Physician, Lemuel Shattuck Hospital. Member, Executive Committee, Department of Orthopedic Surgery, New England Baptist Hospital. Member, American Academy of Orthopedic Surgeons, American Rheumatism Association, Eastern Orthopaedic Association.



2:30 Intermission to Visit Exhibits

3:00 "Mechanical Assist Respirators—When and When Not to Use"

Douglas David, M.D., Louisville

"Industrial Diseases of Lungs and Disability Evaluation"

William H. Anderson, M.D., Louisville

"Treatment of TB and Fungous Diseases"

To Be Announced

"Stress Testing"

Borys Surawicz, M.D., Lexington

"Evaluation of Left Ventricular Function"

James S. Cole, M.D., Lexington

"Coronary Bypass"

Allan M. Lansing, M.D., Louisville

Bring your Questions and Ask the Experts

Kentucky Chapter, American College of Emergency Physicians

Eclipse Room

Program To Be Announced

Kentucky Society of Pathologists

Cincinnati Room

1:30 "Bone Disease of Osteomalacia, Osteoporosis and Hyperthyroidism"

Sanford I. Roth, M.D., Little Rock, Ark.

Kentucky Chapter, American Academy of Pediatrics

Grand Republic Room

1:30 "Clinical Applications and Limitations of Exercise Testing in Children"

Samuel Kaplan, M.D., Cincinnati, Ohio

2:15 "Arrhythmias in Children"

Carol M. Cottrill, M.D., Lexington

2:45 Intermission to Visit Exhibits

3:15 "Clinical Applications and Limitations of Echo-cardiography in Children"

Robert Solinger, M.D., Louisville

4:00 Business Meeting

Kentucky Society for Plastic and Reconstructive Surgery

Majestic Room

1:00 "Early Management of the Injured Hand"

Morton L. Kasdan, M.D., Louisville

1:15 "Surgical Management of Rheumatoid Hand"

Graham Lister, M.D., Louisville

1:30 "Management of the Stiff Hand"

Paul M. Weeks, M.D., St. Louis, Mo.

1:50 Discussions

2:00 "Primary Repairs of Shotgun Injuries of Face"

Allen Stryker, M.D., Louisville

2:15 "Severe Facial and Hand Injuries from Tire Rim Explosions"

Terry D. Tubb, M.D., Lexington

2:30 Discussions—Intermission to Visit Exhibits

- 3:00 "Use of Cervical Flaps in Head and Neck Cancer"
Edward A. Luce, M.D., Lexington
- 3:15 "Techniques in Small Vessel Reconstructions"
Robert D. Acland, M.D., Louisville
- 3:30 "Management of Breast Asymmetry"
Tom D. Nichol, M.D., Louisville
- 3:45 "Surgical Treatment of Cutaneous Manifestations of Systemic Disease"
William L. Dowden, M.D., Lexington
- 4:00 Discussions
- 4:15 Business Meeting

Kentucky Orthopaedic Society

Louisville & Kentucky Rooms
(Ramada Inn)

- 1:00 Business Meeting
- 1:30 "Management of Fracture-Dislocations of the Spine"
Peter T. Kirsch, M.D., Louisville
- 1:45 "Thoracolumbar Fractures"
Maynard L. Stetten, M.D., Louisville
- 2:00 "Pott's Paraplegia"
Robert Kleinhenz, M.D., Louisville
- 2:15 "Herrington Rod Instrumentation Under Hypotensive Anesthesia"
Robert Gaines, M.D., Louisville
- 2:30 "Unilateral Joint Compartment Replacement of the Knee"
David B. Stevens, M.D., Lexington
- 2:45 Intermission to Visit Exhibits
- 3:15 "The Management of Total Hip Complications"
Roderick H. Turner, M.D., Boston, Mass.
- 4:30 "Bluegrass and the Zickel Nail"
William G. Winter, M.D., Lexington
- 4:45 "Short Fibula and the Pickle Fork Hand Syndrome"
James W. Harkess, M.D., Louisville
- 5:00 "Fractures of the Femur in Children"
Steve Roberts, M.D., Louisville

Kentucky Chapter, American College of Surgeons

Assembly Hall

Program to be Announced

Kentucky Urological Association

Delta Queen Room

- 1:30 "The Surgery of Staghorn Calculi"
Ralph A. Straffon, M.D., Cleveland, Ohio
- 2:30 Intermission to Visit Exhibits
- 3:00 Pyelogram Hour
- 3:30 Business Meeting

WEDNESDAY, SEPTEMBER 28

MORNING SESSION

General Session

John M. Baird, M.D., Danville
KMA Vice-President, Presiding

- 9:00 "The Evolution of the Total Knee Replacement"
Roderick H. Turner, M.D., Boston, Mass.

RALPH A. STRAFFON, M.D. Cleveland, Ohio



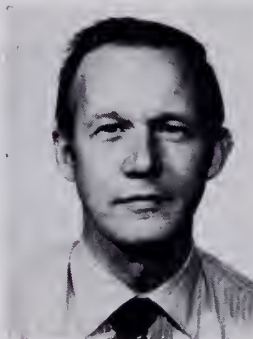
Chairman, Department of Urology, Cleveland Clinic Foundation. M.D., 1953, University of Michigan School of Medicine. President, American Board of Urology. Secretary, American Association of Genitourinary Surgeons. Member, Urology Advisory Council, National Kidney Foundation. Post Secretary, Clinical Society of Genitourinary Surgeons. Editorial Board member, Urological Survey. Fellow, American College of Surgeons. Urological Fellow, American Academy of Pediatrics.

SANFORD I. ROTH, M.D. Little Rock, Arkansas

Professor and Chairman, Department of Pathology, University of Arkansas for Medical Sciences. M.D., 1956, Harvard Medical School. Pathologist, Arkansas Children's Hospital. Member, International Academy of Pathology, American Society for Experimental Pathology, American Association of Pathologists and Bacteriologists, American Society of Dermatopathology, Society for Investigative Dermatology. Author of numerous articles and abstracts on parathyroid glands.



PAUL M. WEEKS, M.D. St. Louis, Missouri



Professor of Surgery (Plastic and Reconstructive) and Head of the Division, Washington University School of Medicine. M.D., 1958, University of North Carolina. Plastic Surgeon-in-Chief, Barnes Hospital and St. Louis Children's Hospital. Member, American Society of Plastic and Reconstructive Surgeons, American Society for Surgery of the Hand, Plastic Surgery Research Council, American Burn Association, American Association for Surgery of Trauma.

RICHARD L. MILLER, D.D.S., Ph.D. Louisville, Kentucky

Chairman, Department of Oral Pathology/Pathology, School of Dentistry, University of Louisville. D.D.S., 1967, Washington University School of Dentistry. Ph.D., 1972, State University of New York at Buffalo. Associate in Oncology, Cancer Center, University of Louisville. Member, International Association of Dental Research, American Academy of Oral Pathology, American Dental Association.

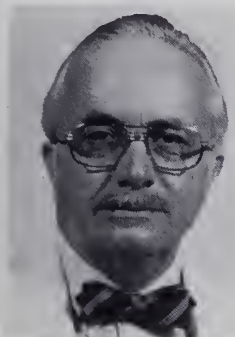


BAYARD H. MORRISON, III, M.D.
Bethesda, Maryland

Assistant Director, National Cancer Institute, National Institute of Health. M.D., 1957, Emory University School of Medicine. Member, American Cancer Society Committee on Unproved Methods of Cancer Treatment. Staff Assistant, President's Commission on Heart Disease, Cancer and Stroke, 1964. Member, American Association for the Advancement of Science, Public Health Cancer Association of America, American Public Health Association.



HENRY M. LEMON, M.D.
Omaha, Nebraska



Professor of Medicine and Head, Division of Oncology, University of Nebraska College of Medicine. M.D., 1940, Harvard Medical School. Director, Eugene C. Eppley Institute for Research in Cancer and Allied Diseases. Fellow, American College of Surgeons. Member, American Association for Cancer Research, Central Society for Clinical Research. Diplomate, American Board of Medical Oncology. Member, American Joint Committee, Committee on Pancreatic Cancer. Author of over 150 scientific articles relating to cancer treatment.

JACK A. VENNES, M.D.
Minneapolis, Minnesota

Professor of Medicine, University of Minnesota. M.D., 1951, University of Minnesota. Member, Committee on Training and Standards of Practice, American Society of Gastrointestinal Endoscopy. Member, American Association for the Study of Liver Disease, American Society for Clinical Investigation, American Federation for Clinical Research, American Gastroenterological Association.



KAREN M. COST, Ph.D.
Louisville, Kentucky



Instructor, Department of Medicine, University of Louisville. Ph.D., 1963, Ohio State University. Chief, Immunology-Serology, Norton-Children's Hospitals. 1976 Outstanding Young Woman of America. Principal investigator, Kentucky Tobacco and Health Research Grant, 1976-77. Member, American Rheumatism Association, American Society for Microbiology, American Association for the Advancement of Science.

- 9:20 "Renal Autotransplantation and Bench Surgery"
Ralph A. Straffon, M.D., Cleveland, Ohio
- 9:40 "Hypercalcemia and Hyperparathyroidism—Diagnosis and Treatment"
Sanford I. Roth, M.D., Little Rock, Ark.
- 10:00 Intermission to Visit Exhibits
- 10:30 "Office Management of Acute Hand Injuries"
Paul M. Weeks, M.D., St. Louis, Mo.
- 10:50 "Differential Diagnosis of Acute Oral Ulcerations"
Richard L. Miller, D.D.S., Ph.D., Louisville
- 11:10 "Abdominal and Pelvic Ultrasound and A Personal View on Comparison with Computerized X-Ray Body Tomography"
Harendra Nath, M.D., Lexington

PRESIDENT'S LUNCHEON

**Banquet Area, Bluegrass Convention Center
11:50 a.m.**

*Paul J. Parks, M.D., Bowling Green
KMA President, Presiding*

Invocation

Recognition

Awards Presentation

*Fred C. Rainey, M.D., Elizabethtown
Chairman, KMA Awards Committee*

Luncheon Speaker

*Grady Nutt, Louisville
The Prime Minister of Humor*

Installation of the New KMA President

WEDNESDAY, SEPTEMBER 28

**AFTERNOON SESSION
General Session**

*Richard F. Hench, M.D., Lexington
Chairman, KMA Scientific Program Committee,
Presiding*

Theme: "Cancer"

- 2:00 "The National Cancer Plan: Research Accomplishments"
Bayard H. Morrison, III, M.D., Bethesda, Md.
- 2:20 "Practical Aspects of Improved Cancer Care by Cooperative Activities of Cancer Centers with Practicing Physicians"
Henry M. Lemon, M.D., Omaha, Neb.
- 2:50 "Endoscopic Retrograde Cholangiopancreatography—Present Status"
Jack Anderson Vennes, M.D., Minneapolis, Minn.
- 3:10 Intermission to Visit Exhibits
- 3:40 "Head & Neck Cancer: Treatment & Rehabilitation"
Donald A. Shumrick, M.D., Cincinnati, Ohio
- 4:00 "Immunologic Diagnosis of Cancer"
Karen Cost, Ph.D., Louisville
- 4:20 Panel Discussion
Bayard H. Morrison, III, M.D.
Henry M. Lemon, M.D.
Jack Anderson Vennes, M.D.
Donald A. Shumrick, M.D.
Karen Cost, Ph.D.

THURSDAY, SEPTEMBER 29

MORNING SESSION

General Session

Harold L. Bushey, M.D., Barboursville
Vice-Chairman, KMA Board of Trustees, Presiding

- 9:00 "What's New in Immunological Diseases"
 Evelyn V. Hess, M.D., Cincinnati, Ohio
- 9:20 "Current Concepts Regarding Hydrocephalus"
 William F. Meacham, M.D., Nashville, Tenn.
- 9:40 "Office Management of Vulvar Disease"
 Eduard G. Friedrich, Jr., M.D., Milwaukee, Wis.
- 10:00 "So, You've All Heard of Acanthosis Nigricans, But
 There Are Other Ways Internal Cancer Can Affect
 the Skin"
 Peyton E. Weary, M.D., Charlottesville, Va.
- 10:20 Intermission to Visit Exhibits
 Theme: "Alcoholism"
- 10:50 "What Every Physician Should Know About Drinking
 Problems and Alcoholism"
 Maxwell N. Weisman, M.D., Baltimore, Md.
- 11:20 "New Developments in Alcoholics"
 Arnold M. Ludwig, M.D., Lexington
- 11:40 "A Suggested Program for the Control of Alcoholism
 in Industry"
 Robert J. Hilker, M.D., Chicago

AFTERNOON SESSION

Ten Specialty Group Meetings

(Simultaneous scientific programs of ten specialty groups will be held at 1:30 p.m. All KMA members are invited and no general sessions will be held this afternoon.)

Kentucky Dermatological Society

Norton-Children's Hospital

- 1:30 Clinical Presentation of Cases
 Lafayette G. Owen, M.D., Louisville

Kentucky ENT Society

Natchez Room

Program to be Announced

Kentucky Chapter, American Academy of Family Physicians

Majestic-New Orleans Rooms

- 1:30 "Diagnosis of Arthritis"
 Evelyn V. Hess, M.D., Cincinnati, Ohio
- 2:30 "Treatment of Arthritis"
 Evelyn V. Hess, M.D., Cincinnati, Ohio
- 3:30 Intermission to Visit Exhibits
- 4:00 "Hyponatremia for the Practicing Physician"
 David J. Marwil, M.D., Georgetown
- 4:20 "The Family Physician and the Chest X-Ray"
 Jim S. Simpson, M.D., Lexington

Kentucky Neurosurgical Society

Delta Queen Room

- 1:30 To Be Announced
 William F. Meacham, M.D., Nashville, Tenn.

EVELYN V. HESS, M.D.
 Cincinnati, Ohio



McDonold Professor of Medicine, University of Cincinnati College of Medicine. M.D., 1949, University College, Dublin. Director, Division of Immunology and Arthritis Foundation Clinical Research Center, University of Cincinnati. Editorial Board member, Arthritis and Rheumatism Journal, Clinical Immunology and Immunopathology. Chairman, FDA Arthritis Advisory Committee. Post President, Central Rheumatism Society. Fellow, Royal Society Medicine, American Academy of Allergy, American College of Physicians.

WILLIAM F. MEACHAM, M.D.
 Nashville, Tennessee



Clinical Professor of Neurological Surgery, Vanderbilt University School of Medicine. M.D., 1940, Vanderbilt University. 1973 recipient, The Neurosurgeon Award, American Academy of Neurological Surgery. Chairman, Commission on Quality Education in Neurological Surgery. Post President, Society of Neurological Surgeons, American Association of Neurological Surgeons, Neurological Society of America.

EDUARD G. FRIEDRICH, JR., M.D.
 Milwaukee, Wisconsin



Associate Professor, Department of Gynecology and Obstetrics, Medical College of Wisconsin. M.D., 1963, Johns Hopkins Hospital. Director, Medical Research, Kimberly-Clark Corporation. Secretary-Treasurer and Founding Fellow, International Society for Study of Vulvar Disease. Fellow, American College of Obstetricians and Gynecologists. Editorial Board member, Sexually Transmitted Diseases. Member, American Society of Colposcopy and Colpomicroscopy.

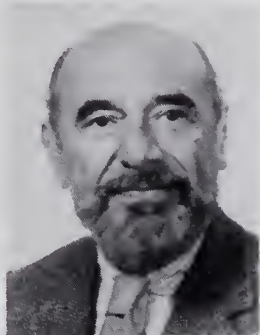
PEYTON E. WEARY, M.D.
 Charlottesville, Virginia



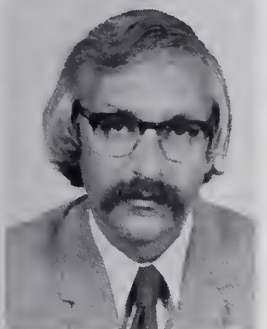
Professor and Chairman, Department of Dermatology, University of Virginia. M.D., 1955, University of Virginia. Member, Board of Directors, and Chairman, Council on Governmental Liaison, American Academy of Dermatology. Secretary-Treasurer, Association of Professors of Dermatology. Member, Board of Directors, Society for Investigative Dermatology. Member, American Dermatological Association.

MAXWELL N. WEISMAN, M.D.
Baltimore, Maryland

Faculty member, Department of Psychiatry, Johns Hopkins University and University of Maryland. M.D., 1958, University of Amsterdam in the Netherlands. Past President, American Medical Society on Alcoholism. Member, Task Force on Alcoholism and Drugs, National Council of Churches of Christ. Fellow, American Psychiatric Association. Author of numerous articles relating to psychiatry, psychoanalysis and alcoholism.



ARNOLD M. LUDWIG, M.D.
Lexington, Kentucky



Chairman, Department of Psychiatry, University of Kentucky. M.D., 1958, University of Pennsylvania School of Medicine. Editorial Board member, International Journal of the Addictions. 1970 recipient, Hofheimer Prize Award for research, American Psychiatric Association. Author of over 80 publications on schizophrenia, hypnosis, LSD, drug abuse, alcoholism and psychotherapy.

- 2:00 "Intraoperative Management of Advanced Risk Carotid Endarterectomy"
James S. Warson, M.D., Lexington
- 2:30 Intermission to Visit Exhibits
- 3:00 "Management of Neurogenic Bladder"
A. Byron Young, M.D., Lexington
- 3:30 "Surgical Pathology of Arterio-Venous Malformation"
Henry David Garretson, M.D., Ph.D., Louisville

Kentucky OB-GYN Society

Island Queen-Idlewild Rooms

- 1:30 "Update on Management of Herpes Vulvitis"
Eduard G. Friedrich, Jr., M.D., Milwaukee, Wis.
- 2:00 "New Methods of Post-Coital Contraception"
A. Albert Yuzpe, M.D., London, Ontario, Canada
- 2:30 Intermission to Visit Exhibits
- 3:00 "Modern Management of Vulvar Dystrophy"
Eduard G. Friedrich, Jr., M.D., Milwaukee, Wis.
- 3:30 "Laparoscopic Sterilization Via Cautery: Complications and Results"
A. Albert Yuzpe, M.D., London, Ontario, Canada

Take This Issue Home To Your Wife

You are urged to take this issue home for your wife to read. Many activities planned during the Annual Meeting will be of interest to her. The program for the Annual Convention of the Auxiliary to KMA is also included in this issue.

- 3:45 "Laparoscopic Sterilization Via Tubal Banding: Complications and Results"
Preston P. Nunneley, M.D., Lexington
- 4:00 Panel Discussion

Kentucky Society of Allergy and Clinical Immunology

Eclipse Room

- 1:30 Business Meeting
- 2:30 Intermission to Visit Exhibits
- 3:00 Clinical Case Presentations

Kentucky Association of Public Health Physicians

Kentucky Room (Ramada Inn)

- 1:30 Business Meeting

Kentucky Occupational Medical Association

Cincinnati Room

- 1:30 "Confidentiality of Medical Records in Industry"
Robert J. Hilker, M.D., Chicago

**Kentucky Chapter,
American College of Physicians**

Grand Republic Room

- 1:30 "The Histamine-2 [H₂] Receptor and Future Treatment of Peptic Ulcer"
Paul Mandelstam, M.D., Lexington
- 1:50 "Interesting Aspects of Pancreatitis"
Jack A. Vennes, M.D., Minneapolis, Minn.
- 2:10 "Prevention and Management of Retained Biliary Calculi"
J. P. Moss, M.D., Louisville
- 2:30 Intermission to Visit Exhibits
- 3:00 "Strongyloides Colitis"
Robert W. Powell, M.D., Louisville
- 3:20 "Some Considerations of Diabetes Mellitus"
Oscar B. Crawford, M.D., Nashville, Tenn.
- 3:40 "Viral Hepatitis—New Dilemmas"
Fredrick Weber, M.D., Lexington

Kentucky Psychiatric Association

Assembly Hall

- 1:30 "Craving and Alcoholism"
Arnold M. Ludwig, M.D., Lexington

**MESSAGE CENTER
491-1929**

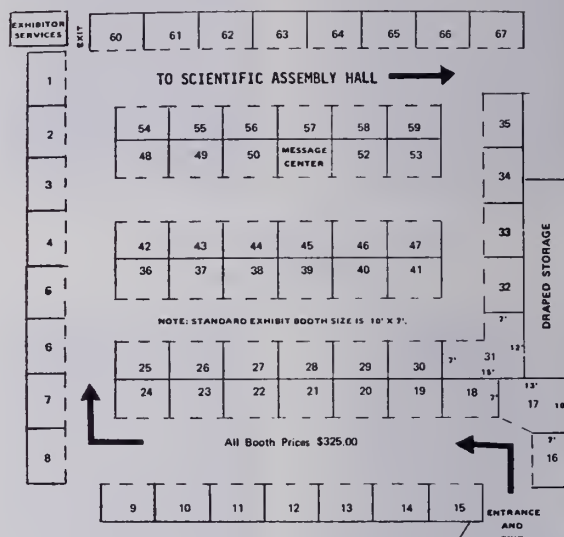
You may be reached at this number during the KMA Annual Meeting in Louisville, September 27-29.

Latest Research Advances in Products and Services Offered by 1977 Technical Exhibits

The technical exhibits at the 1977 KMA Annual Meeting will feature the latest developments in medical techniques and information. Located in the Bluegrass Convention Center, the exhibits will condense a volume of information and ideas in such a manner that a vast amount of knowledge can be secured in a short period of time.

Prepared carefully and skillfully to appeal to you, the physician, the exhibits are especially geared to your special interests as a practitioner. Medical representatives and other exhibitors will be on hand to discuss personally their products and services to you. Both you and your patients should benefit from the information that can be gained from a visit to the technical exhibits.

Thirty-minute intermissions have been planned during each general and specialty group session so that every physician may take advantage of this excellent opportunity provided by the exhibits.



Floor Plan of Technical Exhibits

1977 TECHNICAL EXHIBITORS

Abbott Laboratories (24)
Accounting Systems Company (27)
Acme Visible Records, Inc. (47)
Ames Company (22)
Armour Pharmaceutical Company (26)
Ayerst Laboratories (60)
Blue Cross and Blue Shield of Kentucky (18)
Boehringer Ingelheim Ltd. (50)
Burroughs Wellcome Company (7)
The Central Pharmacal Company (58)
CIBA Pharmaceutical Company (6)
Cooper Laboratories (36)
Cracker-Fels Company (35)
CUE Systems, Inc. (44)
Dairy & Food Nutrition Council of the Southeast, Inc., Mid South (4)
Dictaphone Corporation (10)
Division for Disability Determinations (28)
Dolbey & Company (SONY) (55)
Dow Chemical Company (14)
Eaton Laboratories (19)
Encyclopaedia Britannica (40)
Fisons Corporation (45)

General Medical Louisville & Lexington (1)
Gerber Products Company (65)
Guild of Prescription Opticians of Kentucky (23)
Humana, Inc. (43)
International Clinical Laboratories of Ky., Inc. (54)
Ives Laboratories (49)
John Hancock Life Insurance Company (9)
Kremers-Urban Company (34)
The Lang Company (2)
Lederle Laboratories (66)
A. P. Lee Agency (13)
Eli Lilly and Company (15)
Lorillard (53)
Louisville Medical Laboratory (33)
Malkin Instrument Company (42)
Marion Laboratories (67)
Mead Johnson Laboratories (20)
MeDec Management, Inc. (29)
The Medical Protective Company (5)
Merck Sharp & Dohme (62)
Metropolitan—Medicare Office (61)
Meyer Laboratories, Inc. (3)

Mitchell Orthopedic Supply (31)
Navy Recruiting District (46)
Ortho Pharmaceutical Corporation (16)
Parke, Davis & Company (8)
Pathology & Cytology Laboratories, Inc. (11)
Pfizer Laboratories (12)
Wm. P. Poythress & Co., Inc. (25)
Professional Insurance Associates (56)
Ransdell Surgical, Inc. (37)
R. J. Reynolds Tobacco Company (39)
Riker Laboratories, Inc. (21)
A. H. Robins Company (59)
Ross Laboratories (41)
Sandoz Pharmaceuticals (30)
Clayton L. Scroggins Associates, Inc. (32)
Searle Laboratories (48)
E. R. Squibb & Sons, Inc. (38)
Stuart Pharmaceuticals (64)
Systemedics/AMS (57)
USAF Recruiting Det 311 (63)
Wyeth Laboratories (52)
Zimmer Kloeene of Kentucky, Inc. (17)

Roerig presents a guide through the labyrinth of vertigo



Vertigo is a potentially complex condition often encountered in office practice. Over 3.5 million patient visits last year were attributable to conditions of the inner ear, with vertigo or dizziness as prominent symptoms.

Roerig can help keep you informed on the latest in vertigo therapy through complimentary materials designed to aid diagnosis, treatment and patient education.

Current Concepts in the Diagnosis and Treatment of Vertigo—This two-volume audio cassette/print compendium presents the views of four leading clinicians. Subjects include: history-taking, etiology, symptomatology, diagnostic techniques and treatment.

Anatomy Made Simple—Explanation of the cause and treatment of vertigo can be aided by a detailed anatomic presentation of the inner ear structures.

■ **Continuing Update on Vertigo Therapy**—The most recent research and clinical concepts are presented in a semi-annual publication, *Journal of Vertigo*. Contents include an original article and abstracts from the international biomedical literature.

■ **Accurate Patient History-Taking**—A specially designed patient questionnaire can aid in determining the nature of your patients' symptomatology. The *Vertigo History Form* can also provide important diagnostic clues to possible etiologic factors.

You can receive these complimentary programs from Roerig simply by filling out and mailing the coupon below.

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vertigo therapy

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SJ-8/7

☐ Please send me complimentary materials on vertigo therapy.

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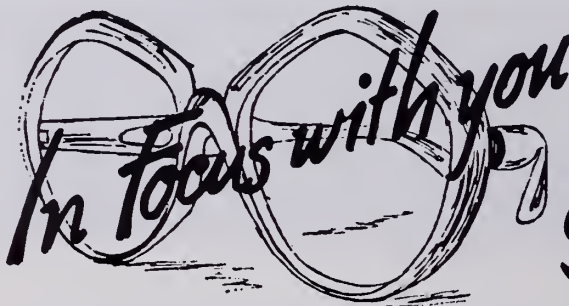
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Zip _____ Specialty _____

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Southern Optical

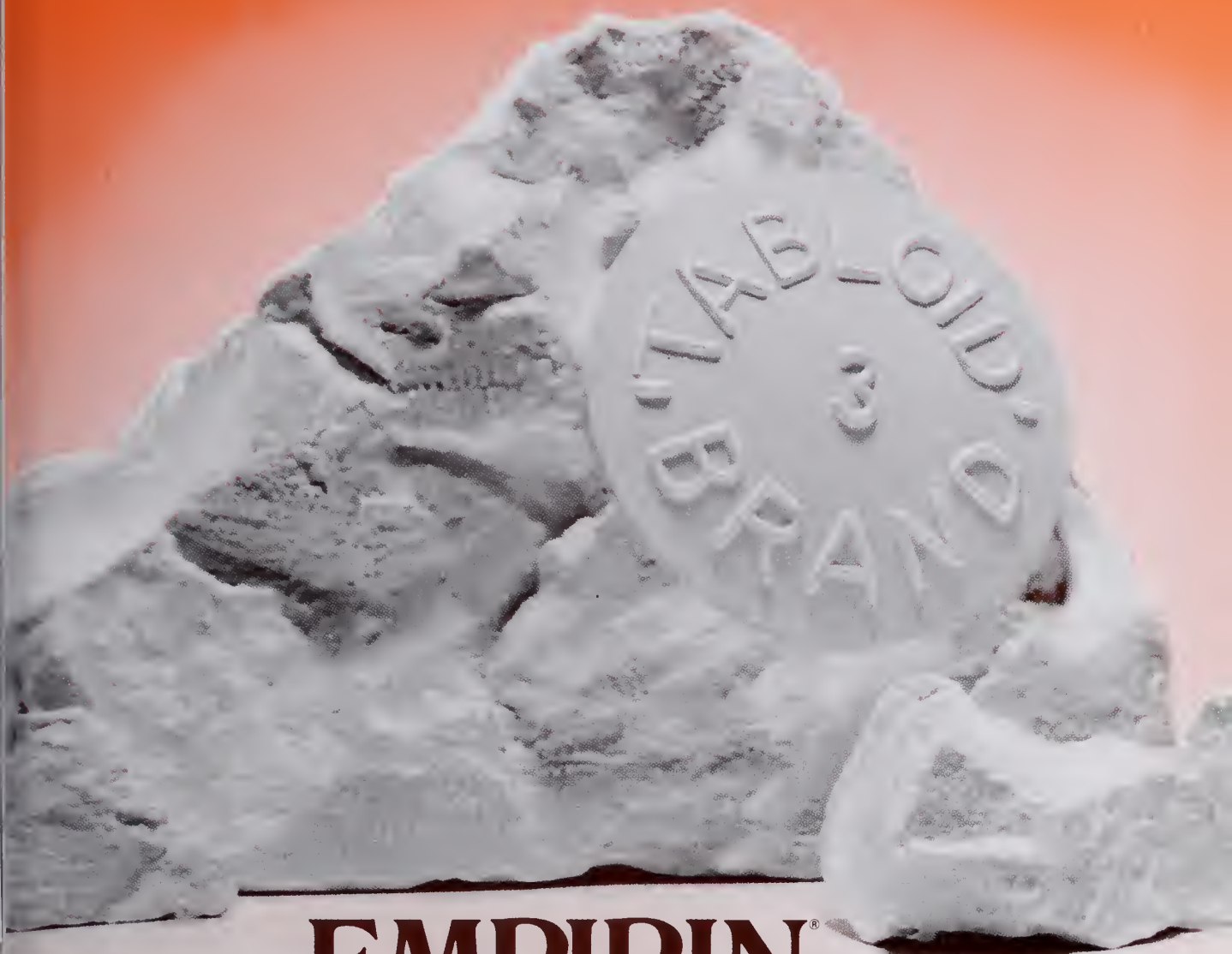
| | | | |
|---|--|------------------------|----------|
| LOUISVILLE | Southern Optical Bldg. | 640 River City Mall | 583-0687 |
| | Medical Towers Bldg. | Floyd & Gray | 582-1119 |
| | Doctors Office Bldg. | Liberty at Floyd | 583-7909 |
| | Medical Arts Bldg. | 1169 Eastern Parkway | 452-2332 |
| | Professional Bldg. East | 3101 Breckinridge Lane | 459-0133 |
| ST. MATTHEWS | Medix Bldg.—Adj. S.S. Mary & Elizabeth Hosp. | | 367-2277 |
| | Broadway Bldg. | 224 E. Broadway | 583-7137 |
| | 313 Wallace Avenue | | 895-9155 |
| | 108 McArthur Drive | | 895-3855 |
| | 901 Dupont Road at Breckinridge Lane | | 897-3264 |
| NEW ALBANY BOWLING GREEN OWENSBORO | Professional Arts Bldg. | 1919 State Street | 945-2802 |
| | Greentree Shopping Ctr. | 900 Fairview Ave. | 843-6556 |
| | Doctors Bldg. | 1001 Center Street | 684-1508 |
| | Lincoln Professional Ctr. | 2816 Veach Road | 685-4725 |
| | Happy Valley Center | 409 Happy Valley Rd. | 651-5113 |
| GLASGOW | | | |

HEARING AIDS
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 New Albany Professional Arts Bldg. • 1919 State St.
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YOU MAKE THE CHOICE.**



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Each tablet contains: codeine phosphate, 32 mg (gr ½), (Warning: May be habit-forming); aspirin, 227 mg; phenacetin, 162 mg; and caffeine, 32 mg. 

The classic codeine pain reliever

For decades, Empirin Compound c Codeine #3 has provided potent analgesia plus the anti-inflammatory action of aspirin for consistently dependable pain relief in the majority of your pain patients. Brand name quality at reasonable cost; readily available in hospital and local pharmacies.

Plus CIII prescribing convenience: up to 5 refills in 6 months (where state law permits), and telephone prescribing permissible in most states. See page 3 of advertisement for prescribing information.

NOW...

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AS IMPORTANT AS BEING DIFFERENT.



Introducing the peach-colored
acetaminophen/codeine tablet

EMPRACETTM

ċ CODEINE #3

Each tablet contains: codeine phosphate, 30 mg (gr ½),
(Warning: May be habit-forming); and acetaminophen, 300 mg. ©

Empracet \bar{c} Codeine #3: non-aspirin/codeine pain reliever for aspirin- sensitive patients

EMPRACET \bar{c} Codeine #3 offers you an alternative with advantages for your aspirin-sensitive patients, those with bleeding disorders and "...patients undergoing surgical procedures associated with significant blood loss such as tonsillectomies, open heart surgery, and scoliosis repair..."*

NEW LOOK

Not the same old green and black capsule with a "revised formula." Not a white tablet with aspirin-associations. New peach-colored EMPRACET \bar{c} Codeine #3 looks different from the leading codeine combination products. It doesn't contain aspirin, so it doesn't look like aspirin—imparting greater reassurance to patients leary of taking it by mistake. It also avoids confusion with other tablets in the household.

NEW NAME

Not a household word, the new name may play a positive role in your pain patient's subjective reaction to your prescription.

EMPRACET \bar{c} Codeine #3. New look. New name. Psychologically more acceptable to your patients. And with CIII prescribing convenience for you—up to 5 refills in 6 months at your discretion (where state law permits), and telephone prescribing permissible in most states.

*Czapek EE: JAMA 235:636, 1976.

EMPIRIN[®] COMPOUND with CODEINE

Contraindications: Hypersensitivity to aspirin, phenacetin, caffeine or codeine.
Warnings: See Warnings below.

Precautions: **Allergic:** Precautions should be taken in administering salicylates to patients with active peptic ulcers and those with known allergies; patients with nasal polyps are especially likely to be hypersensitive to the medication. SEE ADDITIONAL PRECAUTIONS BELOW.

Adverse Reactions: Most frequent adverse reactions are listed below. Some patients taking salicylates develop nausea and vomiting. Hypersensitivity may be manifested by skin rash or anaphylactic reaction. With these exceptions, most side effects occur after repeated administration of large doses; include headache, vertigo, ringing in ears, mental confusion, drowsiness, sweating, thirst, nausea, and vomiting. Occasional patients experience gastric irritation and bleeding with aspirin.

Phenacetin side effects usually result from overdosage. Cyanosis, acute hemolytic anemia, skin lesions, and fever may appear with toxic doses. Continued abuse may lead to renal damage.

Caffeine side effects almost always result from overdosage; include insomnia, restlessness, excitement, tense muscles, and diuresis. Tachycardia and extra systoles may be observed.

EMPRACET[™] with Codeine Phosphate, 30 mg, No. 3

Contraindications: Hypersensitivity to acetaminophen or codeine.

WARNINGS, PRECAUTIONS, ADVERSE REACTIONS AND DRUG INTERACTIONS COMMON TO BOTH PRODUCTS

Warnings: **Drug dependence.** Codeine can produce drug dependence of the morphine type and may be abused. Dependence and tolerance may develop upon repeated administration; prescribe and administer with same caution appropriate to oral narcotics. Subject to the Federal Controlled Substances Act.

Usage in ambulatory patients. Caution patients that these products may impair mental and/or physical abilities required for performance of potentially hazardous tasks such as driving a car or operating machinery.

Interaction with other CNS depressants. Patients receiving other narcotic analgesics, general anesthetics, phenothiazines, tranquilizers, sedative-hypnotics, or other CNS depressants (including alcohol) may exhibit additive CNS depression; when used together reduce dose of one or both.

Usage In Pregnancy. Safe use is not established. Should not be used in pregnant patients unless potential benefits outweigh possible hazards.

Precautions: Head injury and increased intracranial pressure. Respiratory depressant effects of narcotics and their capacity to elevate cerebrospinal fluid pressure may be markedly exaggerated in the presence of head injury, other intracranial lesions or a pre-existing increase in intracranial pressure. Narcotics produce adverse reactions which may obscure the clinical course of patients with head injuries.

Acute abdominal condition. These products or other narcotics may obscure the diagnosis or clinical course of acute abdominal conditions.

Special risk patients. Administer with caution to certain patients such as elderly or debilitated patients and those with severe impairment of hepatic or renal function, hypothyroidism, Addison's disease, or prostatic hypertrophy or urethral stricture.

Adverse Reactions: Most frequently include lightheadedness, dizziness, sedation, nausea, and vomiting; more prominent in ambulatory than in nonambulatory patients; some may be alleviated if patient lies down; others include: euphoria, dysphoria, constipation and pruritis.

Drug Interactions: CNS depressant effect may be additive with that of other CNS depressants. See Warnings.

For symptoms and treatment of overdosage and full prescribing information, see package insert.



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Research Triangle Park
North Carolina 27709

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Empirin Compound
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COLBY PROCLAIMS WOMAN SUFFRAGE

Signs Certificate of Ratification
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MILITANTS VEXED AT PRIVACY.

Wanted Movies of Ceremony,
But Both Factions Are

WASHINGTON, Aug. 26, 1920—
The struggle for wom-



TRUMAN CLOSES UNITED NATIONS CONFERENCE WITH PLEA TO TRANSLATE CHARTER INTO DEEDS

NEW WORLD HOPE

President Hails 'Great
Instrument of Peace,'
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HISTORIC LANDMARK

Meeting Gives Standing
Ovation as Executive
Pictures Peace Gain

Social Security Bill Is Signed Gives Pensions to Aged, Jobless

Roosevelt Approves Message Intended to Benefit 30
Persons When States Adopt Cooperating Laws—the
Measure 'Cornerstone' of His Economic Program

SENATE APPROVES 18-YEAR OLD VOTE IN ALL ELECTIONS

Amendment to Constitution
is Sent to House, Where
Passage is Expected

WASHINGTON, March 10,
1971—The Senate approved
today, 94 to 0, and sent to

WASHINGTON, Aug. 26, 1935—
The Social Security Bill, a
broad program of unemployment
insurance and old age
pensions, counted upon to
benefit 20,000,000 persons, be-
came law today when it was signed
by President Roosevelt in the
White House. Those chiefly responsible
for its passage through Congress

Mr. Roosevelt called it
"the cornerstone of my economic
program," which is being built
to help the people.

the Draft Ends No

"If we fail to use it," he declared
to the solemn final meeting of the
delegates, "we shall betray all of
those who have died in order that
we might meet here in freedom and
safety to create it."
"If we seek to use it selfishly—for
the advantage of any one nation or
any small group of nations—we
shall be equally guilty of that be-
trayal."

Fervent interpolation
The President, speaking in the
auditorium of the War Memorial
Opera House, built in memory of
sons of the Golden Gate city who
gave their lives in the first World
War, in which he himself served,
seemed to give unconscious expres-
sion to the solemn feeling of the
occasion when, at the outset of his
speech, he interpolated the words:
"half a hope, half a prayer."
"Oh, what a great day this can
be in history!"

Just before the plenary session

WASHINGTON, Jan. 27,
1973—"With the signing of
the peace agreement in
Paris today, and after re-
ceiving a report from the

PATIENT PACKAGE INSERTS: A CONCEPT WHOSE TIME HAS COME?

The consumer's right to know is an irreversible and desirable trend of the Seventies. It extends, and properly, to a patient's right to know more about his or her prescription medications. One way, gaining favor, is through patient package inserts. Wisely prepared and properly distributed when medically indicated, they could markedly improve patient knowledge and drug therapy—laudable goals by anyone's standards.

The PMA endorses these goals and will work with government, the health professions and consumers to achieve them.

The Advantages

The concept holds promise of benefits: better patient understanding of the product prescribed, better adherence to the treatment plan, and more awareness of possible side reactions.

Every doctor has had patients who fail to finish antibiotic regimens because they feel better. Some patients assume that if one tranquilizer or analgesic is good, two may be twice as good. Still others fail to report dizziness while on antihypertensive therapy—and so on.

Problems like these might arise less often if the patient received written information in addition to verbal instructions. Some studies suggest that patients are more receptive to such materials, and they more often understand the verbal instructions and follow them, when inserts are used.

The Disadvantages

There are also some potential problems. Obviously, the inserts must be clearly phrased, without extraneous or complex detail. How much information

is enough? How can it be kept current? Should all patients receive the same information? Should inserts be included with all drugs? Should only potential problems be listed or are patients better off with a "fair balance" presentation that describes usefulness as well as drawbacks?

These and similar questions require answers, since model inserts have yet to be properly developed and tested. Despite the need for these studies, the FDA is proceeding prematurely with inserts on selected products. We think the Congress is the only place where the matter can be given the proper legal status and direction, particularly since it represents a conceptual change in the legal, medical and social framework of the nation's prescription drug information system.

The Solution

The PMA believes that carefully-devised pilot studies of various kinds of inserts are needed. They should be developed and implemented with full participation by doctors, pharmacists, consumers, communications experts and the drug industry. Such studies will provide reliable pathways to follow, so that inserts will be useful aids to medical practice.

And particularly we think that you should be closely involved in this debate and in these studies and decisions. Otherwise, people with less experience and qualifications may control the purposes, content and use of a tool with considerable promise for improved patient care. It could make a difference in your practice tomorrow, and more importantly, in the health of your patients.

PMA

THE PHARMACEUTICAL MANUFACTURERS ASSOCIATION
1155 FIFTEENTH ST., N.W., WASHINGTON, D.C. 20005

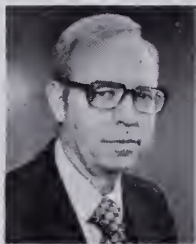


ASSOCIATIONAL NEWS



Dr. & Mrs. Gardner Elected To National Offices

Doctor and Mrs. Hoyt D. Gardner were both "winners" at the AMA and AAMA Annual Convention held June 18-23 in San Francisco.



Doctor Gardner



Mrs. Gardner

Re-elected on the first ballot to a second term on the AMA Board of Trustees, Doctor Gardner will serve for three years in this position. A Past President of KMA and the Jefferson County Medical Society, Doctor Gardner has been extremely active in organized medicine on both the state and national level. He served for 12 years as Chairman for National Affairs of the KMA Committee on Legislative Activities and is a past AMPAC Board Chairman.

Mrs. Rose Gardner, President of the KMA Auxiliary in 1969-70, was elected as First Vice-President of the Auxiliary to the AMA. Responsible for national membership planning, Mrs. Gardner has served as the Auxiliary representative to the AMA Council on Legislation and has been active in political activity in Kentucky.

Driver Impairment Is Topic Of Sept. 30 Seminar

KMA and AMA will be co-sponsors of a seminar on September 30 which will deal primarily with the diagnosis and handling of patients who have an impairment that may present an unacceptable hazard as a driver of a motor vehicle.

The one-day meeting, which will follow the close of the 1977 KMA Annual Meeting, is entitled "Preventive Medicine—A Concern of Practicing Physicians." It will be held at the Ramada Inn in Louisville from 9 a.m. to 3 p.m. The registration fee of \$10 will include a luncheon.

Both Kentucky and out-of-state experts will take part in the presentations on such subjects as telescopic devices and driving, motorcycle injuries, legal issues surrounding compulsory helmet and seat belt laws, and

the importance of medical records in reporting driver impairment.

The Seminar will be limited to 25 physicians. Interested physicians should contact Lee N. Hames, AMA, 535 N. Dearborn St., Chicago, Illinois 60610, at once. A program and background material will be sent on a first-come basis.

To Keep You Informed— On Liability Insurance

There has been considerable information distributed to you detailing our current liability insurance problem. As you may have already read, the courts have overturned the Professional Liability Insurance Law of 1976 based on certain parts of the Bill being declared unconstitutional.

The KMA has petitioned the Supreme Court for a re-hearing on their decision. In the meantime, other opportunities to alleviate this problem are being considered which include the possibility of the introduction of new legislation to the General Assembly in 1978 or the possible formation of an insurance company to handle the umbrella coverage of the state's physicians.

The officers and staff are continuously meeting and discussing the alternatives they can recommend to the membership that will best benefit the physicians of Kentucky. If you should have any specific questions, please feel free to contact the KMA Office.

1977 Leadership Conference Held To Increase Communications

The KMA Leadership Conference was held on July 14 at the Hyatt Regency Lexington. The meeting was a result of a resolution passed by the 1976 House of Delegates which called for the appointment of a committee of county medical society officers to advise the President and help stimulate better communications between the county societies and the state association.

Approximately 70 physicians were in attendance at the Conference which included presentations and discussions on such timely topics as, "Liability Insurance Update" and "An Historical Look at the Future of Health Care Costs."

The Honorable Julian M. Carroll made an unscheduled visit to the conference and expressed his continuing support to help the physicians of Kentucky alleviate the liability insurance problem.

The exchange of information at the conference will, hopefully, be beneficial in keeping more of the membership better informed of the activities the Association is involved in on their behalf.

U.L. Alumni Reunions Planned During KMA Annual Meeting

Ten classes of the University of Louisville School of Medicine are planning reunions for alumni. The reunions are scheduled to be held during the KMA Annual Meeting, September 27-29.

Chairmen of the five-year classes are listed below. Information regarding the reunions may be obtained by contacting the Chairman or the UL Alumni Office, (502) 588-5783.

In addition, the UL Alumni Association is planning to hold a reception on September 27 at the Plainview Swim and Racquet Club at 5 p.m. An information booth will also be set up in the Exhibit Hall during the meeting in order to give alumni the opportunity to view upcoming plans at the Health Center.

1927—Robertson O. Joplin, M.D., 3364 Medical Arts Bldg., Louisville, 458-3325.

1932—Charles F. Blankenship, M.D., 3002 Falmouth Dr., Louisville, 454-7289

1937—Charles G. Bryant, M.D., 3357 Medical Arts Bldg., Louisville 452-1558.

1942—Harold F. Berg, M.D., 900 Doctors Office Bldg., Louisville, 583-8819 or R. Parnell Rollings, M.D., 9901 Linn Station Rd., Louisville, 423-2276.

1947—Edward Warrick, Jr., M.D., 203 Baptist East Doctors Bldg., Louisville, 897-0269.

1952—Burton M. Heine, M.D., 1163 Medical Arts Bldg., Louisville, 451-9484.

1957—Chairman not chosen yet.

1962—Stuart Fink, M.D., 4213 Cane Run Rd., Louisville, 447-8188.

1967—Stanley Lowenbraun, M.D., 802 Doctors Office Bldg., Louisville, 582-3735.

1972—George H. Barrows, M.D., University of Louisville School of Medicine, 588-5341.

CME Records Due August 15

In September, 1976, the KMA House of Delegates voted to endorse voluntary continuing medical education, and directed that the KMA Headquarters keep records of participation in CME by members.

Every KMA member was contacted to announce the records-keeping process and notices have also appeared in the KMA "Communicator" and *Journal*. These records are being kept as a service to the membership, and as a means to show that KMA is committed to voluntary CME.

Reporting forms sent out generally followed the format of the AMA Physician Recognition Award requirements, but any convenient manner of reporting can be used, including reports sent to other organizations, such as the American Academy of Family Physicians.

If you have not yet reported your individual activities to KMA, please send any records in no later than August 15. No information relating to these records will be released unless requested by the reporting physician, or except by general reference.

For further information please contact the KMA office.



Paul Parks, M.D. (left), KMA President, accepts AMPAC's Leadership Award from Michael P. Levis, M.D. (far right), Pittsburg, Secretary of AMPAC. Presented during the first session of the AMA House of Delegates in June, the award honored Kentucky for having its entire AMA leadership delegation as 1977 Sustaining members of AMPAC.

Letters to the Editor

The Kentucky Academy of Physician's Assistants is trying to contact all PA's working in the state to offer them opportunities for continuing education. If you have a PA in your office or clinic who is certified or eligible for certification, please have him/her send name and address to: *Brian Brown, 435 Kingsway Drive, Lexington, Kentucky 40502.*

Elizabeth K. Dorsey, P.A.C.
131 Hamilton Park
Lexington, Kentucky

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Louisville, Ky. — **St. Joseph Infirmary Emergency Department.** Accepting applications for 4th member of group. 25,000 annual patient volume, excellent nursing staff. Minimum guarantee/fee-for-service compensation. *Contact T. P. Cooper, M.D. 1-800-325-3982 for details.*



Members in the news

NEW MEMBERS

CAMPBELL-KENTON

Michael A. Grefer, M.D., Ft. Thomas
Paul J. Janson, M.D., Ft. Thomas

FAYETTE

Charles T. Lucas, M.D., Lexington
Barry W. Ramsey, M.D., Lexington
William W. Walton, Jr., M.D., Lexington
Ranjit Weerakoon, M.D., Lexington

JEFFERSON

Linda Busenbark, M.D., Louisville
Darwin Edwards, M.D., Louisville
William M. Epstein, D.M.D., Louisville

MARTIN

Ekambaram Parameswaran, M.D., Naugatuck, W. Va.

McCRACKEN

William G. Jennings, M.D., Paducah

In Memoriam

VICTOR P. DALO, M.D. Louisville 1900-1977

Victor Paul Dalo, M.D., died on July 2 at the age of 77. A family physician in Louisville for almost 50 years, Doctor Dalo was a 1928 graduate of the University of Louisville School of Medicine. A staff physician at SS. Mary & Elizabeth Hospital for 47 years, Doctor Dalo belonged to the Jefferson County Medical Society and the Kentucky Medical Association.

WILLIAM McDANIEL EWING, M.D. Louisville 1910-1977

William McDaniel Ewing, M.D., 67, died on July 16. An orthopedic surgeon, Doctor Ewing graduated from the University of Louisville School of Medicine in 1935 and served overseas for 31 months during World War II. He was a consultant for numerous area hospitals and was Associate Professor of Orthopedic Surgery at the University of Louisville. He belonged to the Jefferson County Medical Society, and the Kentucky and American medical associations.



Headquarters Activity

KMA had physicians and staff members in attendance at the following activities and events:

JULY

- 6 Ad Hoc Committee on Liability Insurance, Louisville
- 11 *Journal* Editors Meeting, Louisville
- 13 KMA Board of Trustees, Lexington
- 14 Leadership Conference, Lexington
- 19 Scientific Exhibits Committee, Louisville
- 21 Physicians' Health Committee, Louisville
- 28 Board of Medical Licensure, Louisville

AUGUST

- 2 Sixth District Trustee Meeting, Bowling Green
- 4 Health Care Costs Council Meeting, Louisville
- 8 *Journal* Editors Meeting, Louisville
- 10-11 Board of Trustees Meeting, Louisville
- 17 Judicial Council, Louisville
- Cancer Committee, Louisville

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10 years of successful use by many of Kentucky's most prominent physicians

- *itemized monthly statements*
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- *aged accounts receivable status*
- *financial reports*
- *increased collections*
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- *more efficient personnel*
- *reduced overhead*

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THE ANXIETY-SPECIFIC.

- a predictable pattern of patient response
- seldom associated with serious side effects, in proper dosage
- rarely interferes with mental acuity
- used concomitantly with many primary medications
- three dosage strengths meet most patient needs

LIBRIUM® chlordiazepoxide HCl/Roche 5mg, 10mg, 25mg capsules

Libritabs® (chlordiazepoxide) available
in 5 mg, 10 mg and 25 mg tablets.

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Relief of anxiety and tension occurring alone or accompanying various disease states.

Contraindications: Patients with known hypersensitivity to the drug.

Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. As with all CNS-acting drugs, caution patients against hazardous occupations requiring complete mental alertness (e.g., operating machinery, driving). Though physical and psychological dependence have rarely been reported on recommended doses, caution in administering to addiction-prone individuals or those who might increase dosage; withdrawal symptoms (including convulsions), following discontinuation of the drug and similar to those with barbiturates, have been reported.

Use in Pregnancy: Use of minor tranquilizers during first trimester could almost always be avoided because of increased risk of congenital malformations as suggested by several studies. Consider possibility of pregnancy when instituting therapy; advise patients to discuss therapy if they intend to or do become pregnant.

Precautions: In the elderly and debilitated, in children over six, limit to smallest effective dosage (initially 10 mg or less per day) to preclude ataxia or oversedation, tapering gradually as needed and tolerated. Not recommended in children under six. Though generally not recommended, if combined therapy with other psycho-

tropics seems indicated, carefully consider individual pharmacologic effects, particularly in use of potentiating drugs such as MAO inhibitors and phenothiazines. Observe usual precautions in presence of impaired renal or hepatic function. Paradoxical reactions (e.g., excitement, stimulation and acute rage) have been reported in psychiatric patients and hyperactive aggressive children. Employ usual precautions in treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation have been reported very rarely in patients receiving the drug and oral anticoagulants; causal relation-

ship has not been established clinically.

Adverse Reactions: Drowsiness, ataxia and confusion may occur, especially in the elderly and debilitated. These are reversible in most instances by proper dosage adjustment, but are also occasionally observed at the lower dosage ranges. In a few instances syncope has been reported. Also encountered are isolated instances of skin eruptions, edema, minor menstrual irregularities, nausea and constipation, extrapyramidal symptoms, increased and decreased libido—all infrequent and generally controlled with dosage reduction; changes in EEG patterns (low-voltage fast activity) may appear during and after treatment; blood dyscrasias (including agranulocytosis), jaundice and hepatic dysfunction have been reported occasionally, making periodic blood counts and liver function tests advisable during protracted therapy.

Usual Daily Dosage: Individualize for maximum beneficial effects. *Oral—Adults:* Mild and moderate anxiety and tension, 5 or 10 mg *t.i.d.* or *q.i.d.*; severe states, 20 or 25 mg *t.i.d.* or *q.i.d.* *Geriatric patients:* 5 mg *b.i.d.* to *q.i.d.* (See Precautions.)

Supplied: Librium® (chlordiazepoxide HCl) Capsules, 5 mg, 10 mg and 25 mg—bottles of 100 and 500; Tel-E-Dose® packages of 100, available in trays of 4 reverse-numbered boxes of 25, and in boxes containing 10 strips of 10; Prescription Paks of 50, available singly and in trays of 10. Libritabs® (chlordiazepoxide) Tablets, 5 mg, 10 mg and 25 mg—bottles of 100 and 500. With respect to clinical activity, capsules and tablets are indistinguishable.



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September 1977
Volume 75
Number 9

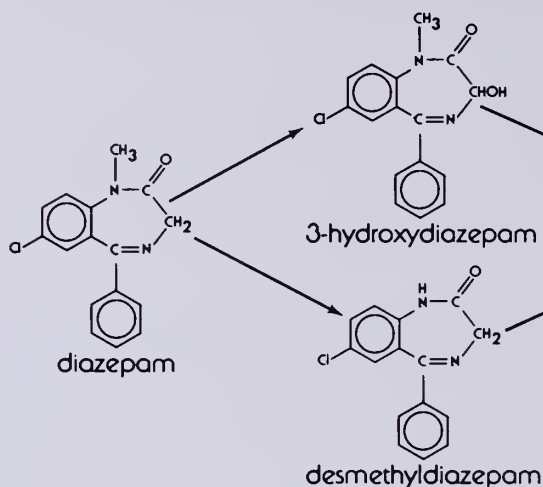
Meetings, Committee Assignments Listed
For 1977 KMA Annual Meeting
September 26-29, Louisville

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The Journal Of The Kentucky Medical Association

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OCT 4 - 1977

A pharmacokinetic character all its own



Valium (diazepam) is a benzodiazepine with a distinctive pharmacokinetic profile

The pharmacokinetic profile of Valium is one of the characteristics that sets it apart from other benzodiazepines. Consider, in particular, the metabolic pathway of Valium. The three major metabolites of Valium exhibit significant pharmacologic activity—and so, of course, does the parent substance—diazepam itself. All combine to produce the characteristic clinical response seen with Valium. The response you have come to know, to want and to trust.

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2-mg, 5-mg, 10-mg scored tablets
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Indications: Tension and anxiety states; somatic complaints which are concomitants of emotional factors; psychoneurotic states manifested by tension, anxiety, apprehension, fatigue, depressive symptoms or agitation; symptomatic relief of acute agitation, tremor, delirium tremens and hallucinosis due to acute alcohol withdrawal; adjunctively in skeletal muscle spasm due

to reflex spasm to local pathology; spasticity caused by upper motor neuron disorders; athetosis; stiff-man syndrome; convulsive disorders (not for sole therapy).

Contraindicated:

Known hypersensitivity to the drug. Children under 6 months of age. Acute narrow angle glaucoma;

may be used in patients with open angle glaucoma who are receiving appropriate therapy.

Warnings: Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anticonvulsant medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms (similar to those with barbiturates and alcohol) have occurred following abrupt discontinuance (convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). Keep addiction-prone individuals under careful surveillance because of their predisposition to habituation and dependence.

Usage in Pregnancy: Use of minor tranquilizers during first trimester should almost always be avoided because of increased risk of congenital malformations as suggested in several studies. Consider possibility of pregnancy when instituting therapy; advise patients to discuss therapy if they intend to or do become pregnant.

Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed; drugs such as phenothiazines, narcotics, barbiturates, MAO inhibitors and other antidepressants may potentiate its action. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.

Side Effects: Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.



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Volume 75 • September 1977

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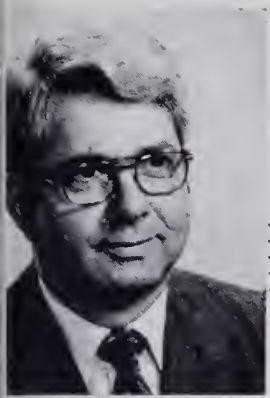
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MESSAGE FROM THE PRESIDENT



Let me take this opportunity to thank all of you for your support during my year as President. Only those who have been in this position can imagine the amount of work that goes on in the KMA office and the amount of time involved as relates to the presidency. There are multiple pieces of mail received daily supplying information on federal health programs, AMA health and political concerns, letters of criticism from KMA members, letters of inquiry from KMA members or allied health groups, letters asking about KMA policies and numerous other subjects. To be well informed the President must read and evaluate all of this material and be ready to answer questions about it.

Without the support of most of you through your personal comments, the great work by the KMA staff, and an occasional letter of commendation, the office of president could well be one to shy away from rather than to seek. However, the feeling that perhaps something good has been done for all Kentucky physicians through some of the actions taken, the multiple visits made on behalf of the Association, and the work contributed by many of you make the year one of pleasure and satisfaction.

If there are a lot of unsolved problems remaining, let these become a challenge to all of you to make the next year one of more cooperation, more encouragement, and more work on your part to help the new President achieve greater and more lasting solutions.

Paul J. Parks

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At Blue Cross and Blue Shield and Delta Dental of Kentucky, we're concerned about the cost of health care. That's why day after day, year after year, we work with doctors, hospitals and other providers to hold down costs.

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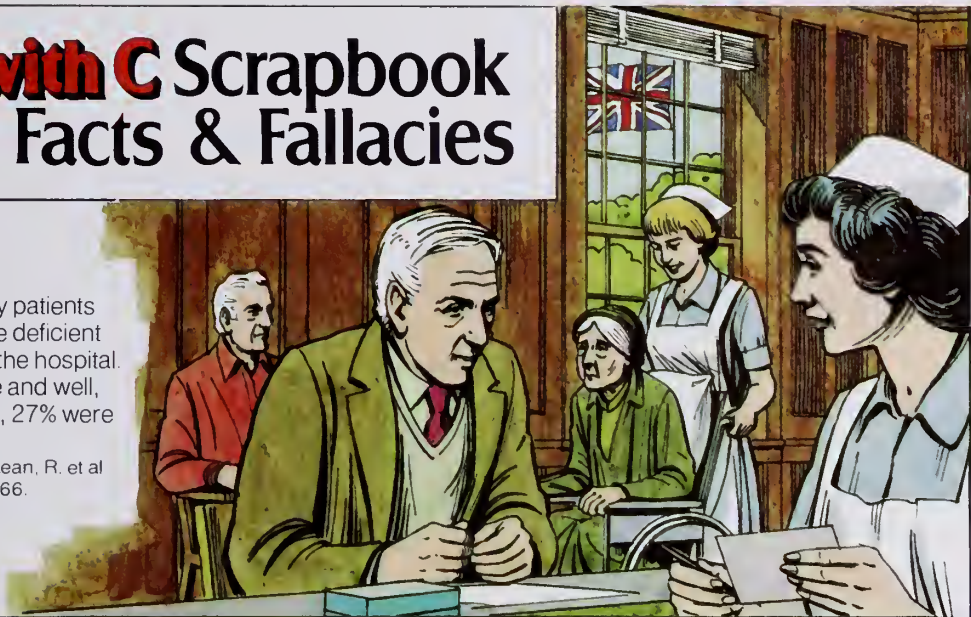
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Griffiths, L.L., Brocklehurst, J.C., MacLean, R. et al
Diet in Old Age, Brit. Med. J., 1:739, 1966.



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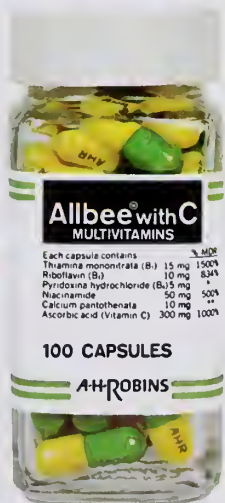
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| Atropine sulfate | 0.0194 mg | 0.0194 mg |
| Hyoscine hydrobromide | 0.0065 mg | 0.0065 mg |

Indications: Based on a review of this drug by the NAS/NRC and/or other information, FDA has classified the following indications as possibly effective: adjunctive therapy in the treatment of peptic ulcer; the treatment of the irritable bowel syndrome (irritable colon, spastic colon, mucous colitis) and acute enterocolitis. Final classification of the less-than-effective indications requires further investigation.

Brief summary. Contraindicated in patients with glaucoma, renal or hepatic disease, obstructive uropathy (for example, bladder neck obstruction due to prostatic hypertrophy) or a hypersensitivity to any of the ingredients. Blurred vision, dry mouth, difficult urination, and flushing or dryness of the skin may occur at higher dosage levels, rarely at the usual dosage.

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POSTGRADUATE OPPORTUNITIES



IN KENTUCKY

SEPTEMBER

- 15 John I. Perlstein Memorial Lectureship, "Sexual Differentiation—Normal and Abnormal," by Robert Blizzard, M.D., Charlottesville; Health Sciences Center Auditorium, Louisville
- 16-17 Fiberoptic Bronchoscopy Workshop, University of Kentucky Medical Center, Fee: \$200.
- 17-21 Medicine Update—1977**, Kenlake State Park
- 22-24 "Gynecologic Surgery—Surgical Techniques"**, University of Louisville School of Medicine, Executive West, Louisville
- 26-29 **KMA Annual Meeting, Ramada Inn/Bluegrass Convention Center, Louisville**
- 30 "Contemporary Ultrasound in Obstetrics and Gynecology," University of Louisville School of Medicine. Contact: Sandra Kubarych, R.N., Department of Ob/Gyn, U of L, 323 E. Chestnut, Louisville, Ky. 40202.

OCTOBER

- 2-7 Eighth Family Medicine Review (Session I)*, University of Kentucky College of Medicine, Hyatt Regency Lexington
- 23-28 (Session II)
- 14-15 Regional Meeting, American College of Physicians, Stouffer's Inn, Louisville
- 17-21 Second Family Medicine Review**, University of Louisville School of Medicine, Marriott Inn, Clarksville
- 19-20 Third Annual Symposium—Current Trends in Allergy and Immunology**, Marriott Inn, Clarksville

NOVEMBER

- 3 "Recent Advances in Psychopharmacology"*, by Robert P. Granacher, Jr., M.D. (University of Kentucky), Lake Cumberland Medical Center, Somerset
- 4-5 Conference on Cancer of the Bladder and Prostate, Kentucky Division, American Cancer Society, Stouffer's Inn, Louisville. Space limited, no fee. Contact: George A. Sehlinger, M.D., 2313 Medical Arts Bldg., Louisville, Ky. 40217

*For further information, contact: Frank R. Lemon, M.D., Associate Dean for Continuing Education, University of Kentucky College of Medicine, Lexington 40506

**For further information contact: Gerald D. Swim, Executive Director, Office of Continuing Education, University of Louisville School of Medicine, Louisville 40202

- 10 13th Annual Louisville Pediatric Society Lectureship, Health Sciences Center Auditorium, Louisville
- 11-12 11th Annual Newborn Symposium, University of Louisville School of Medicine, Louisville
- 16 "Update on Hypertension"*, by Gordon Guthrie, M.D. and Russell McAllister, M.D. (University of Kentucky), Jenny Wiley State Resort Park, Prestonsburg

DECEMBER

- 1 "New Dimensions in Treating Hypertension"*, by Donald Vidt, M.D. (Cleveland Clinic), Lake Cumberland Medical Center, Somerset
- 8 "Update on Hypertension"*, Gordon Guthrie, M.D. and Russell McAllister, M.D. (University of Kentucky), Pineville Community Hospital, Pineville

IN SURROUNDING STATES

OCTOBER

- 20-22 Pediatric Orthopedic Conference, Sheraton Hotel, Gatlinburg. Contact: Harvey L. Goodman, M.D., University of Tennessee Center for Health Sciences, 1924 Alcoa Hwy., Knoxville, Tenn. 37920.

NOVEMBER

- 10-12 "Diagnostic Radiology for Emergency and Family Physicians," University of Tennessee College of Medicine, Chattanooga. Contact: Leroy Pickles, CME Director, Suite 400, 921 E. 3rd St., Chattanooga, Tenn. 37403.
- 14-16 "The Trauma Patient: Care and Complications," Sponsored by American College of Surgeons and Case Western Reserve Medical School, Marriott Inn, Cleveland

UPCOMING FEATURES

Annual Meeting Details—
November Journal

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December Journal

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Each tablet contains 130 mg theophylline, 24 mg ephedrine hydrochloride, and 8 mg phenobarbital

Each tablet contains 180 mg anhydrous theophylline (90 mg in the immediate release layer and 90 mg in the sustained release layer); 48 mg ephedrine hydrochloride (16 mg in the immediate release layer and 32 mg in the sustained release layer); and 25 mg phenobarbital in the immediate release layer.

Each 5 ml teaspoonful contains 32.5 mg theophylline, 6 mg ephedrine HCl, and 2 mg phenobarbital; the alcohol content is 15%.

See next page for brief summary.

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T-GP-72

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CAUTION: Federal law prohibits dispensing Tedral SA without prescription.

Description. Tedral: each tablet contains 130 mg theophylline, 24 mg ephedrine hydrochloride, and 8 mg phenobarbital.

Tedral SA: each tablet contains 180 mg anhydrous theophylline (90 mg in the immediate release layer and 90 mg in the sustained release layer); 48 mg ephedrine hydrochloride (16 mg in the immediate release layer and 32 mg in the sustained release layer); 25 mg phenobarbital in the immediate release layer.

Tedral Elixir: each 5 ml teaspoonful contains 32.5 mg theophylline, 6 mg ephedrine hydrochloride, and 2 mg phenobarbital; the alcohol content is 15%.

Indications. Tedral, Tedral SA, and Tedral Elixir are indicated for the symptomatic relief of bronchial asthma, asthmatic bronchitis, and other bronchospastic disorders. They may also be used prophylactically to abort or minimize asthmatic attacks and are of value in managing occasional, seasonal or perennial asthma.

Tedral SA (Sustained Action) offers the convenience of b.i.d. dosage.

Tedral Elixir is convenient for persons who may have difficulty in swallowing tablets.

These Tedral formulations are adjuncts in the total management of the asthmatic patient. Acute or severe asthmatic attacks may necessitate supplemental therapy with other drugs by inhalation or other parenteral routes.

Contraindications. Sensitivity to any of the ingredients; porphyria.

Warnings. Drowsiness may occur. PHENOBARBITAL MAY BE HABIT-FORMING.

Precautions. Use with caution in the presence of cardiovascular disease, severe hypertension, hyperthyroidism, prostatic hypertrophy, or glaucoma.

Adverse Reactions. Mild epigastric distress, palpitation, tremulousness, insomnia, difficulty of micturition, and CNS stimulation have been reported.

Average Dosage. *Prophylactic or Therapeutic.*

Tedral: *Adults*—One or two tablets every 4 hours. *Children*—(Over 60 lb) one-half the adult dose.

Tedral SA: *Adults*—One tablet on arising and one tablet 12 hours later. Tablets should not be chewed. *Children*—Not established for children under 12.

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Supplied. Tedral: White, uncoated scored tablets in bottles of 24 (N 0047-0230-24), 100 (N 0047-0230-51) and 1000 (N 0047-0230-60). Also in Unit Dose—package of 10 x 10 strips (N 0047-0230-11).

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Pulmonary Metastases from Urethral Carcinoma

JUDAH L. SKOLNICK, M.D.*, WILLIAM H. ANDERSON, M.D.**
RICHMAN, M.D.***, and JOE G. CONLEY, M.D.****

Louisville, Kentucky

Urethral carcinoma may metastasize to the lungs. Seventeen such cases are reported in the world literature. A patient with bilateral pulmonary nodules and a previous primary urethral carcinoma is presented. Diagnosis of metastatic urethral carcinoma was made at thoracotomy.

THE differential diagnosis of bilateral pulmonary nodules includes many diseases.

The usual list of tumors metastasizing to the lung does not include urethral carcinoma. In patients with urethral carcinoma the potential for pulmonary metastasis exist. A patient illustrates this situation and the difficulty in treating the metastatic lesions.

Case Report

The patient was a 74-year-old widow who presented for evaluation of bilateral lung nodules. Fourteen years prior to this admission she had pulmonary tuberculosis and received INH (isonicotine hydrazine) and PAS (para-aminosalicylic acid). In September 1973 the patient had surgical removal of a mass at the urethral meatus posteriorly, involving the anterior vaginal wall. The lesion was removed by excision

biopsy and was a transitional cell carcinoma. Following surgery the patient had a 2 plane needle urethral implant of radium consisting of six needles and two crossing needles for a total of six thousand rads. The implants remained in place for seven days.

In April 1974, seven months later, the patient had a 4 mm lesion, approximately 2 cm proximal to the urethral meatus and within the anterior vaginal wall. This was removed by surgical excision and was a transitional cell carcinoma.

The patient did well following the second surgical procedure. In May 1975 chest x-ray revealed bilateral nodules and on June 3, 1975, she had a mild, nonproductive cough but no other complaints. Appetite was good and weight was stable. She was a non-smoker.

On physical examination the liver was enlarged 8 cm below the right costal margin. The urethral meatus appeared irritated and enlarged. Pelvic examination was otherwise normal. The patient underwent extensive laboratory and x-ray evaluation. Routine laboratory studies and multi-channel chemistries were within normal limits. Multiple sputum studies were negative for pathogenic organisms, tuberculosis, fungi, and malignant cells. Fungal complement fixation studies were negative. Chest x-ray revealed multiple small nodular lesions in both lung fields. (Fig. 1). IVP, mammograms, and liver-spleen scan were within normal limits. Uterine scrapings and a cervical biopsy were done and were negative for malignant cells. The patient underwent bronchoscopy, bronchial brushings, and transbroncho-

*Assistant Professor of Medicine, **Professor of Medicine, ***Assistant Clinical Professor of Pathology, ****Assistant Professor of Radiology, University of Louisville School of Medicine, Louisville
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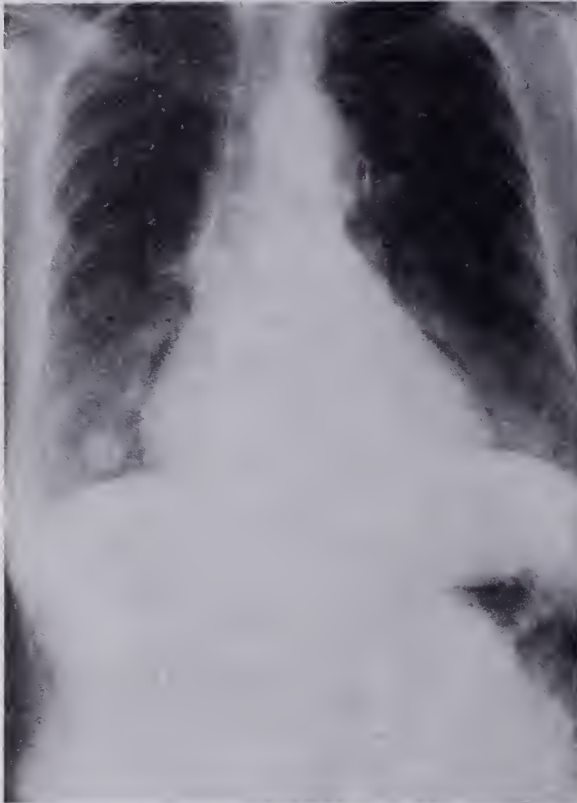


FIG. 1 Admission chest x-ray, June 19, 1975, showing nodular lesions in the right lower and left upper lung fields.

scopic biopsy. Results were not diagnostic. Subsequently, she had an open biopsy of the right lower lung. The lung and pleura were studded with nodular lesions. Microscopically, these lesions were metastatic transitional cell carcinoma. Microscopic examination and comparison of all three surgical specimens, the two urethral lesions and the lung lesion, was performed (Fig. 2,3,4) and all were histologically similar and showed poorly differentiated transitional cell carcinoma.

Because of the widespread lesions in both lungs the patient received chemotherapy in the form of intravenous Cyclophosphamide, 650 mgm per m^2 , and Adriamycin, 60 mgm per m^2 , given every four weeks. The patient did not show any evidence of tumor regression and after six courses of treatment the disease progressed and Piperazinedione, 9 mgm per m^2 , was given intravenously. Intravenous Cytembena (sodium bromate) 400 mgm per m^2 , in divided doses, twice a day for five days was started because of tumor progression. In May 1976 because of further progression of the metastatic lesions, (Fig. 5), chemotherapy was abandoned and she died shortly thereafter.

Discussion

Carcinoma of the urethra is a rare disease but is more common in women. By the mid-1960's approximately 1,000 cases had been reported in both sexes.¹⁻³ The peak age of incidence is 60 years. Occurrence below age 40 is unusual, although there is one case report of a 23-year-old patient with urethral carcinoma.³ A previous history of gonorrhea or stricture is present in a significant number of males with this disease, but is not as prevalent in females. Chronic inflammation, infection, trauma, and urethral caruncles are other predisposing factors.^{2,3} The diagnosis is often delayed because symptoms may be minimal, or the growth may be small. The most common symptoms are hematuria, urinary frequency, and dysuria.^{4,6}

Anatomically, three distinct sites appear to predominate: anterior urethra or urethral orifice; bulbomembranous or vulvourethral; and association with bladder growths.^{3,4,6} There are several histologic tumor types. Squamous cell carcinoma is most common, followed in frequency by adenocarcinoma, transitional cell carcinoma, and a miscellaneous group consisting of mucous

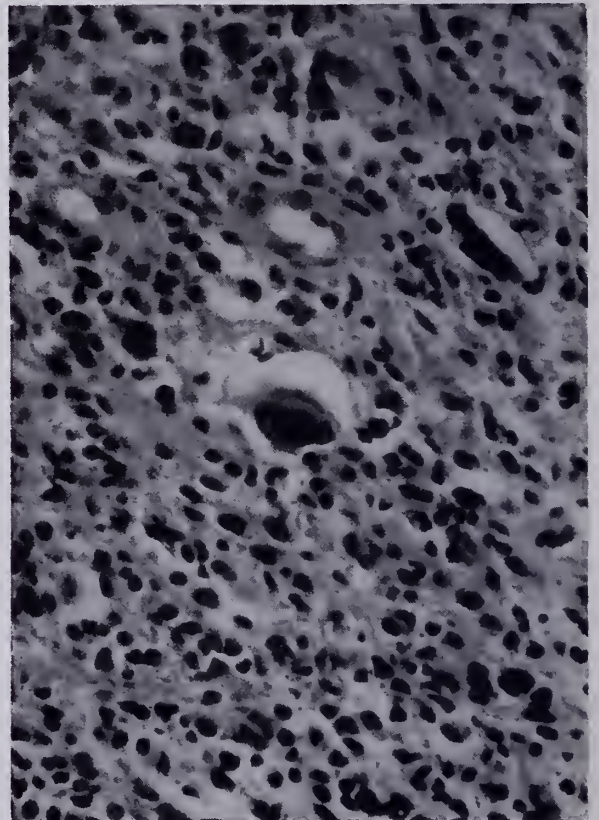


FIG. 2 Biopsy of primary lesion of urethral meatus, September 5, 1973. This is a pleomorphic tumor, primarily of the transitional cell type. (x400)

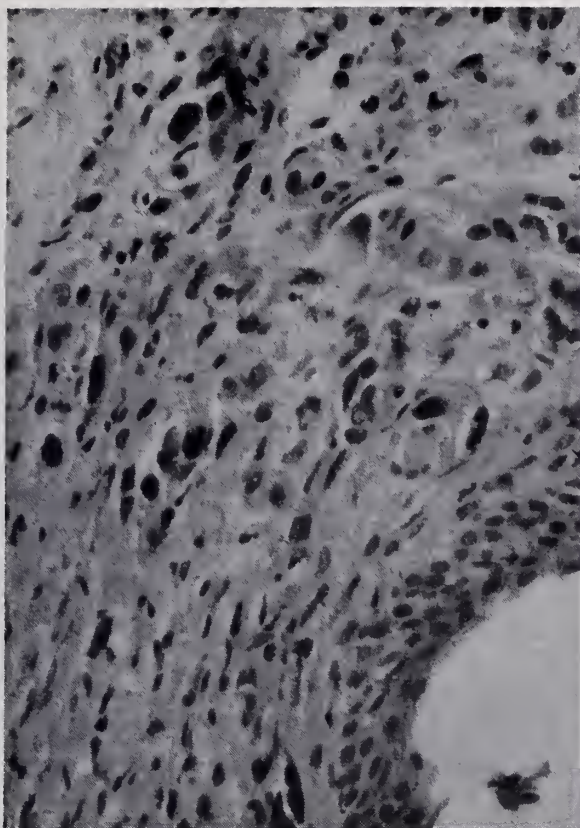


FIG. 3 Recurrent paraurethral nodule excised April 1, 1974. Histologically, it is similar to the primary lesion. (x400)

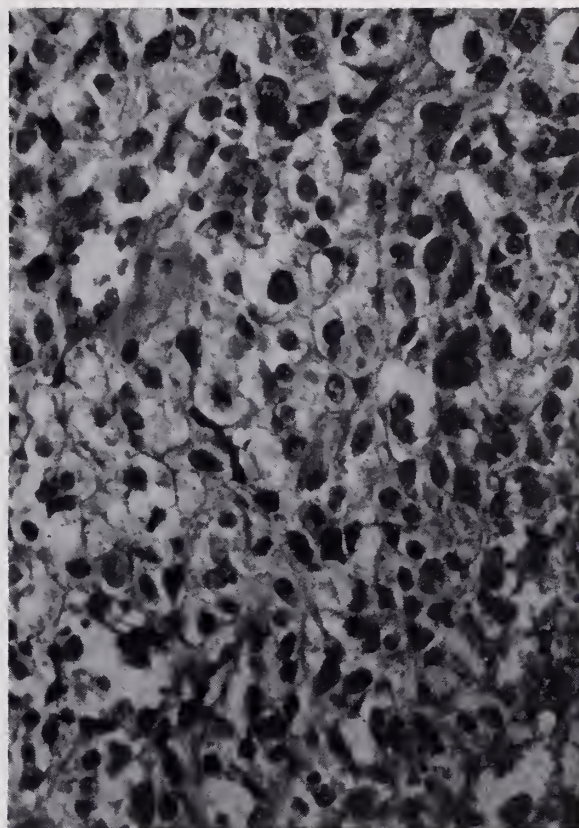


FIG. 4 Representative lung lesion biopsied June 10, 1975. This shows metastatic undifferentiated and transitional carcinoma very similar to the urethral primary. (x400)

gland carcinoma, columnar-cell carcinoma, endo-
theliomata, and melanomas.²⁻¹⁰

Metastases are usually local and regional. The true incidence of metastatic disease is difficult to determine. The most common route of spread is via the lymphatics to the inguinal nodes. Other groups of nodes involved include mediastinal, aortic and iliac glands.² Hematogenous metastases may occur, particularly when the corpus cavernosum is invaded. In these cases the lungs appear to be the primary organ involved. Other sites of involvement are kidneys, liver, bone, and brain.^{3,4}

One series³ reports an incidence of 50% metastases. In another report⁵ 35 of 49 patients had deep invasion or metastases. Grabstald, et al⁴ found distant metastases in 11 of 79 patients.

Adenocarcinoma and squamous cell carcinoma appear to be the cell types most likely to have distant spread. A review of the world literature revealed 17 reported cases with urethral carcinoma metastatic to the lungs.^{3,4,5,11}

Though carcinoma of the urethra is not a very common tumor, it does have the potential to

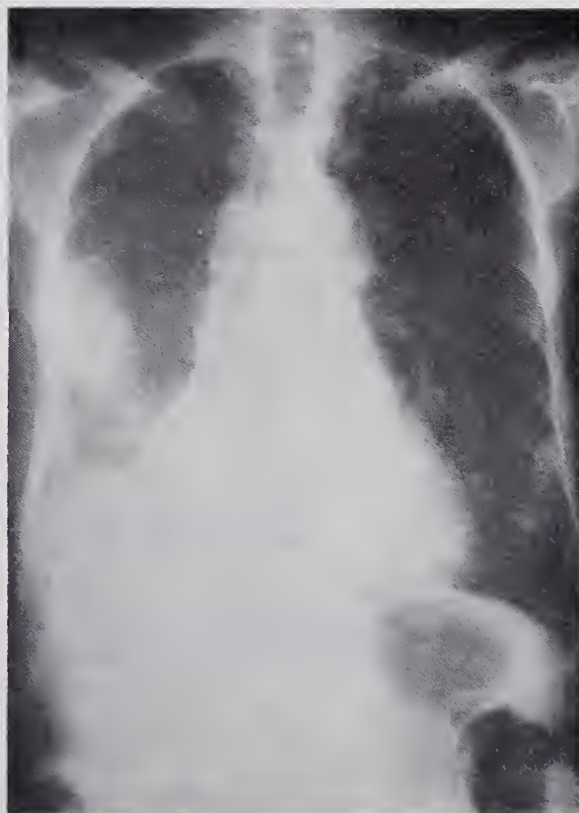


FIG. 5 Chest x-ray May 1976, after 11 months of treatment, showing progressive disease bilaterally.

spread to the lungs and metastatic lesions do not respond well to radiation or to chemotherapy.

References

1. Thompson, I.M., Bwings, F.G.: Aspects of urethral carcinoma. *J. of Urol.* 87:891-895, 1962.
2. Renders, G.: Primary adenocarcinoma of the female urethra. *Acta Urologica Belgica* 41:621-625, 1973.
3. Riches, E.W., Cullen, T.H.: Carcinoma of the urethra. *Brit. J. of Urol.* 23:209-221, 1951.
4. Grabstald, H., Hilaris, B., Henschke, U., et al: Cancer of the female urethra. *JAMA* 197:113-120, 1966.
5. Peterson, D.T., Dockerty, M.B., Utz, D.C., et al: The peril of primary carcinoma of the urethra in women. *J. of Urol.* 110:72-75, 1973.
6. Pointon, R.C.S., Poole-Wilson, D.S.: Primary carcinoma of the urethra. *Brit. J. of Urol.* 40:682-693, 1968.
7. Bracken, R.B., Diokno, A.C.: Melanoma of the penis and the urethra: 2 case reports and review of the literature. *J. of Urol.* 111:198-200, 1974.
8. Iyer, K.M., Shah, A.L., Bapat, R.D., et al: Primary malignant melanoma of the male urethra. *Indian J. of Cancer* 11:213-214, 1974.
9. Geelhoed, G.M., Myers, G.H.: Primary melanoma of the male urethra. *J. of Urol.* 109:634-637, 1973.
10. Girgis, A.S., Bergman, H., Rosenthal, H., et al: Unusual penile malignancies in circumcised Jewish men. *J. of Urol.* 110:696-700, 1973.
11. Mullin, E.M., Anderson, E.E., Paulson, D.F.: Carcinoma of the male urethra. *J. of Urol.* 112:610-613, 1974.

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Musculoskeletal Problems:

Profiled from a Rural Primary Care Center Practice

W. GRADY STUMBO, M.D.*

Hindman, Kentucky

The musculoskeletal problems of a rural family practice is described. From this problem-profile approach, a system of defining the clinical content of family practice is outlined as related to the musculoskeletal system.

WITH problem management in medical practice, it has become possible to determine the skills needed by practitioners. This enables one to delineate the boundaries of one's practice. Although the management and referral practice differs geographically, this difference is most noticeable between rural and non-rural areas. With the development of family practice, it is particularly important to develop clinical skills appropriate for the practice site. To enhance the curricular design for family practice, the musculoskeletal problems of a family practice site were tabulated according to the Primary Care Classification (PriCare Codes). This analysis was used to objectively delineate a practice profile and supplement the physician's mental image of the practice.

Musculoskeletal problems are a common complaint in family practice. To help define the clinical content of family practice, problem profiles need to be developed. In the past, we have seen great emphasis placed on the behavioral sciences, family dynamics, and management skills of family practice; but only recently has the clinical content, the diagnostic, and problem-solving strategy of the family physician evolved. Marsland, Wood, and Mayo identified the problems dealt with by family physicians.¹ The issue at hand is, therefore, to define new clinical information into problem profiles and delineate the skills necessary for appropriate management of that clinical problem.

McWhinney notes that the decision-making process of family practitioners is different from that facing other specialists, who must make final, conclusive diagnoses upon which to base management plans.² The use of McWhinney's binary system in solving musculoskeletal problems would allow the practitioners, for example, to decide if referral was needed or not, if casting was necessary, and to make these decisions before conclusive diagnoses are made.

It is felt that comparisons of this nature are important to the pragmatic aspect of family practice. This paper proposes such an approach to musculoskeletal problems in family practice.

• Method

From a period of January 1, 1976, to December 31, 1976, all patients that presented to East Kentucky Health Services Center received care delivered by a health care team which consisted of physicians, nurses, extenders, a physical therapist, a pharmacist, and technicians. For each patient visit, an encounter sheet was completed by the health care team. The diagnoses or symptoms were coded using the PriCare Codes. Details regarding this particular system of data collection are reported elsewhere.³

These codes are then tabulated on an in-house IBM System 32 computer management information system. The information was identified in a computer printout listing the number of problem encounters under one of three categories: Diseases of the Musculoskeletal System, Accidents, or Ill-Defined Physical Signs and Symptoms. Tables of the problem encounters were then designed to provide visual descriptive statistics of musculoskeletal problems in a rural family practice site.

The numbers presented do not represent individual patient contacts but rather problem encounters (the number of times the problem was dealt with). Therefore, a patient may appear more than once in the tables. The number of

*Family Physician for East Kentucky Health Services Center, Inc., Hindman
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individual patients and a listing of their problems as new or old can be obtained from additional System 32 printouts.

Table 1

Diseases of the Musculoskeletal System and Connective Tissue

| | | |
|-------------------------------------|------|--|
| A. Arthritis | | |
| 1. Rheumatoid | 432 | |
| 2. Osteoarthritis | 1828 | |
| 3. Traumatic with Effusion | 25 | |
| 4. Other Infective Arthritis | 47 | |
| Subtotal | 2332 | |
| B. Non-Articular Rheumatism | | |
| 1. Shoulder Syndromes | 56 | |
| 2. Bursitis, Tenosynovitis | 196 | |
| 3. Other Myalgia | 159 | |
| Subtotal | 411 | |
| C. Vertebral Column | | |
| 1. Cervical Spine | 32 | |
| 2. Thoracic Spine | 9 | |
| 3. Low Back Pain | 1173 | |
| 4. Other Lumbar Syndromes | 42 | |
| 5. Deformities of the Spine | 15 | |
| 6. Backache | 18 | |
| Subtotal | 1289 | |
| D. Other | | |
| 1. Ganglion | 4 | |
| 2. Osteochondrosis | 22 | |
| 3. Osteoporosis | 22 | |
| 4. Other Acquired Deformities | 2 | |
| 5. Other Diseases (Costochondritis) | 88 | |
| Subtotal | 138 | |

The problem encounter lists of all problems/diagnoses for the practice were determined, and the percentage of the practice that musculoskeletal problems represent was calculated (Table 4).

Results

During the 12-month period, there were 63,438 problem encounters. Of these, 5,779 were classified as musculoskeletal-related. Thus, 9.1% of all problems required knowledge of the musculoskeletal system and its evaluation, diagnosis, and treatment. The listing under rheumatoid arthritis of 432 represents 432 separate problem encounters with patients who had a diagnosis of rheumatoid arthritis not 432 individual patients.

The three basic PriCare divisions of musculoskeletal-related problems occur in the following categories:

- A. Definite diagnosis on a non-emergency scheduled problem
- B. Definite diagnosis on an emergency/non-scheduled problem
- C. Ill-defined physical signs and symptoms

Furthermore, many of the Ill-Defined Physical Signs and Symptoms may have been resolved to a definite diagnosis at later clinic visits, and this is not reflected in the tables. On the basis of problem encounters, 15% of the musculoskeletal practice is classified as Ill-Defined Physical Signs and Symptoms. This compares with 12% for all problem encounters in the practice falling in the classification as Ill-Defined Physical Signs and Symptoms.

The number of accidents handled included only those patients who presented for care during office hours. However, analysis of non-office accidents revealed them to be similar to problems handled in the office.

A majority of the problems were managed medically. Some medical problems required referral or consultation with other physicians, but ongoing care was continued by the clinic staff. All surgical problems were referred outside the clinic for surgical management.

Of particular interest is the high number of problem encounters for low back pain and the number of fractures handled by the practice.

Discussion

At present, the only information available in the literature on orthopedic education for family practice are anecdotal accounts of a New Zealand rural practitioner's⁴ and a British general practitioner's⁵ program for continuing education in orthopedics. Data from family practices utilizing

Table 2
ACCIDENTS

| | | |
|----------------------------------|-----|--|
| A. Fractures—Dislocations | | |
| 1. Skull and Facial Bones | 6 | |
| 2. Vertebral Column | 5 | |
| 3. Ribs | 30 | |
| 4. Clavicle | 31 | |
| 5. Humerus | 23 | |
| 6. Radius and Ulna | 57 | |
| 7. Carpals—Tarsals | 60 | |
| 8. Phalanges | 45 | |
| 9. Femur | 16 | |
| 10. Tibia and Fibula | 29 | |
| 11. Other | 38 | |
| 12. Knee Dislocations | 8 | |
| 13. Other Dislocations | 18 | |
| Subtotal | 366 | |
| B. Sprains and Strains | | |
| 1. Shoulder, Elbow, and Arm | 43 | |
| 2. Wrist, Hand, and Fingers | 58 | |
| 3. Knee and Lower Leg | 40 | |
| 4. Ankle | 112 | |
| 5. Foot and Toes | 21 | |
| 6. Whiplash | 10 | |
| 7. Rest of Vertebral Column | 70 | |
| 8. Other Sprains and Strains | 32 | |
| Subtotal | 386 | |

problem-oriented records will contribute to our fund of knowledge of office practice by the family physicians.

The major purpose of this paper is to identify the musculoskeletal problems of a rural practice and to point out the training necessary to manage these problems. In an earlier paper by this author, a problem-profile, skill-approach was outlined for assessing the skills of a practitioner.⁶ Presently, most programs result in less than three months of formal training in managing orthopedic problems. From the author's exposure to students (28 over the past four years), their skills to assess musculoskeletal problems and insight into the management of musculoskeletal problems were minimal.

From problem encounters, one can propose information/skills needed by practitioners to manage the particular problem. In dealing with acute eversion injuries of the ankle, one needs a working knowledge of anatomy of the ankle, x-rays (routine and stress film interpretation), taping, casting, medications, therapy for strengthening the joint, and particular community activities causing such injuries. By using this problem-profile approach to patient management, the knowledge/skills needed by health providers could easily be established.

These knowledge/skills should reflect good clinical judgment when followed and result in a satisfactory outcome in the majority of cases. Thus, by establishing what the necessary skills are, educational objectives can be formulated to evaluate students, residents, and practitioners. Although our results do not show that use of this procedure led to better health care or outcomes, it does show one can develop reliable methods of describing the content of family practice. By adopting this technique, it is the author's expectation that the major impact will be improvement in the process of patient care.

The number of Ill-Defined Physical Signs and Symptoms (15%) indicate that not all problems in family practice can be given a typical text-

book diagnosis. Providers need to be taught how to deal with non-specific problems and provide care at a level appropriate for the problem. Further studies of symptoms in family medicine are needed to learn more about the patient who presents with an undifferentiated complaint.

The number of complaints of low back pain may be high in this area because of unique socio-economic problems. Because of high unemployment and the need for a livelihood, in many cases, a disability check solves the problem. Currently, training of physicians does little to alert future practitioners of this problem. The family physician is a focal point for the interpretation of the orthopedist's exam and the patient's complaint.

Table 4

| Problem Encounters | Total | % |
|------------------------------------|--------|-----|
| Musculoskeletal Problem Encounters | 63,438 | 100 |
| | 5,779 | 9.1 |

The number of accidents may be high for an office practice, but the explanation for this is the high-risk mining industry. Family physicians are not isolated from the work force and the problems they encounter. Special skills are often needed to evaluate these problems.

The problems described in Table 2, subparts A, B, and C, are clinical problems that require medical knowledge of numerous medications, and the ability to treat, for the most part, non-curable chronic diseases. A certain temperament is needed to facilitate the clinical knowledge of a properly trained family practitioner in dealing with these health care problems.

Collaborative studies between family practitioners are needed to hasten our acquisition of a clinical body of knowledge for family medicine. Cooperative efforts between departments in training centers could help insure that providers acquire the necessary knowledge/skills needed to solve musculoskeletal problems in a rural family practice.

References

1. D.W. Marsland, M. Wood, and F. Mayo, "Content of Family Practice." *Journal of Family Practice*, 111 (1976), 37-68.
2. I.R. McWhinney, "Problem Solving and Decision Making In Primary Practice," *Canada Family Physician* 18, X1 (1972), 109-14.
3. "The International Classification of Health Problems in Primary Care," *Continuing Education for the Family Physician*, (May, 1975), pp 31-38.

(Continued on Page 436)

Table 3

Ill-Defined Physical Signs and Symptoms

| | |
|----------------------------|------------|
| A. Limbs and Joints | |
| 1. Pain in Limb | 164 |
| 2. Leg Cramps | 100 |
| 3. Joint Pain | 554 |
| 4. Joint Swelling | 39 |
| Subtotal | 857 |

Toxic Delirium Induced by Deliberate Ingestion of Jimson Weed

JOSEPH M. DEW, M.D.*

Louisville, Kentucky

The deliberate ingestion of Jimson weed as a hallucinogen appears to be widespread. Case reports are presented. The anticholinergic syndrome in the differential diagnosis is discussed in addition to the emergency treatment.

THE incidence of Jimson weed poisoning seems to be on the increase.¹ The diagnosis depends mainly on the recognition of signs of parasympathetic blockade in a patient with delirium which may be manifested by a variety of findings and must be differentiated from functional psychoses or brain syndromes.^{2,3} The mental status of the patient often precludes obtaining an adequate history but any suggestion of the possibility of ingestion of wild plants or seeds should arouse suspicion. A history of Jimson weed or thornapple use may be obtained from family members or companions.

Physiology and Pharmacology

Atropinic or antimuscarinic drugs inhibit the action of acetylcholine on structures innervated by postganglionic parasympathetic nerves with the main effects being at vagal endings.⁴⁻⁷ The main action of all members of this class of drugs are qualitatively similar to those of the best known member, atropine. In general antimuscarinic agents have much less effect on the actions of acetylcholine at other sites, however, high doses of atropine can block transmission at autonomic ganglia or skeletal neuromuscular junctions. Atropine and scopolamine differ quantitatively in antimuscarinic actions with scopolamine having a stronger action on the iris, ciliary body, and certain secretory glands (salivary, sweat, and bronchial). Atropine has a more potent and prolonged action on heart, intestinal, and bronchial muscle than scopolamine.⁵ Toxic

doses of belladonna alkaloids produce central nervous system excitation leading to restlessness, irritability, disorientation, hallucinations, or delirium. With still larger doses, stimulation may be followed by depression, coma, and death from medullary paralysis. The electroencephalogram may show suppression of fast activity and a decrease in voltage.⁵ These changes can be correlated with other clinical manifestations of CNS changes such as ataxia, drowsiness, slurred speech, and impairment of recent memory and attention span. Belladonna alkaloids, by blocking the responses of the sphincter muscle of the iris and the ciliary muscle of the lens to cholinergic stimulation, produce dilatation of the pupil and paralysis of accommodation.⁵ These effects on the eye have been shown to develop more slowly, and to last longer, than do the effects on salivary secretions and heart rate. This suggests a reservoir, perhaps the aqueous humor, that accumulates the drug and later releases it to the ciliary and iris muscles.^{8,9}

The compounds occur naturally in many plants, the most abundant of which in the United States is probably the *Datura stramonium*, also known as thornapple, Jimson weed, or mandragora as well as other names. *Datura stramonium* contains atropine (principally), scopolamine, and hyoscyamine. The Jimson weed encloses its seeds in a pod which bears thorns thereby accounting for one of its names. The blackish seeds, about the size of pepper corns, are the usual source of the alkaloid, although the leaves also contain the alkaloid. The alkaloid has been used for many purposes such as home remedies for asthma or sedation and for criminal purposes such as poisoning. These and other uses have been long known in India, Egypt, Malay states, and elsewhere.^{4,8,10,11}

Physical Findings and Emergency Management

A dry mouth and dilated, sluggish or non-reactive pupils, in combination with hot, dry skin suggests atropine poisoning. Tachycardia,

*Assistant Professor, Department of Family Practice, University of Louisville School of Medicine, Louisville
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mental disorientation or excitement, and complaints of blurred vision serve to reinforce this diagnosis. The descriptive "hot as a hare, blind as a bat, dry as a bone, red as a beet, and mad as a hen" is well to remember.^{8,12} The use of tricyclic antidepressants, phenothiazines, antihistamines, antispasmodic agents, and antiparkinsonian drugs must be considered since they produce similar symptoms.^{8,13} When signs of delirium are present the differential diagnosis should include central anticholinergic toxicity and observation for peripheral anticholinergic signs should be part of the initial evaluation.¹³ These signs, in addition to those mentioned above, include facial flushing, decreased secretions of the mouth, nose, and pharynx, decreased bowel sounds, and urinary retention.^{4,8,13} Fever, which may be quite high (up to 105°F or even higher) usually is present.⁸ The delirium may present as disorientation, anxiety, hallucinations, illusions, confusion, incoherence, agitation, hyperactivity, ataxia, dysarthria, loss of memory, paranoia, combativeness, or seizures.^{3,6} The patient may be comatose. The hot, dry flushed skin may be accompanied by a rash similar to that of scarlet fever which could create diagnostic confusion especially if leukocytosis is present.^{4,13}

The pilocarpine test (one drop of 1% pilocarpine in conjunctival sac) will bring about little change with anticholinergic mydriasis but with other forms of mydriasis, except those secondary to glaucoma or ocular trauma, prompt pupillary constriction will result.¹³ The diagnosis, as well as treatment, of anticholinergic toxicity is aided by the use of physostigmine.^{4,13} Injected intravenously, intramuscularly or subcutaneously it antagonizes the peripheral effects of the atropine, and rapidly and effectively reverses the CNS manifestations. Injection of 1 to 4 mgm of physostigmine has been shown to rapidly abolish the delirium and coma following 200 mgm of atropine.⁴ Neostigmine is of little value since its quaternary ammonium structure prevents its entry into the CNS, and only the peripheral effects of atropine are reversed. Pilocarpine and methacholine also fail to reverse the central effects. The initial doses of physostigmine should be 1 mgm slowly IV (1mgm/minute), or IM, and repeated in 20 minutes if no response. Rapid IV administration may cause bradycardia, convulsions, or hypersalivation with respiratory difficulty. Up to 4 mgm may be given, unless ex-

cessive cholinergic signs are observed.¹³ Should the use of 4 mgm physostigmine fail to produce a change in the patient's status, the diagnosis is likely incorrect. In younger children and elderly patients this dose should probably be reduced 50%. Striking responses can be expected in a few minutes but may not persist since physostigmine is rapidly destroyed (60 to 120 minutes) and the effect of the belladonna alkaloids may last much longer. The repeated administration of physostigmine at intervals therefore may be necessary. Because of this variation of duration the patient must be observed over a period until the alkaloid is excreted. Clinically this may be 12 to 24 hours after the last appearance of the delirium or other signs of anticholinergic activity. An exception is that of pupillary dilation which may persist for several days.

Case Reports

There were six white males, ages 13 through 16, seen in the Emergency Room because of hallucinations, delirium and/or hostility. One case is reported in detail.

A 15-year-old white male was brought to the Emergency Room because he was observed by the family to be "talking out of his head." History was obtained from family members that he along with some friends, had eaten the seeds of Jimson weed about five hours earlier, because they had heard it produced a "high".

He was initially observed to be mumbling incoherently with rapid speech which could only be partially understood. His attention span on direct questioning was very short and often a different answer was given to the same question when it was repeated a moment later. The initial pulse was 124 and regular with respirations 24 and supine blood pressure of 154/80 mm Hg. The skin was dry, warm and flushed. The pupils were widely dilated and unresponsive to light. The patient was completely disoriented for time, place, and person. The deep tendon reflexes were bilaterally hyperactive. The initial temperature was 103°F (Axillary).

The initial peripheral blood count showed a leukocytosis of 11,100 with 75% neutrophils.

The initial treatment consisted of administration of 15cc Ipecac orally followed by several ounces of warm water. This resulted in emesis containing seeds consistent with Jimson weed. He also received physostigmine in 0.5 mgm doses at 20 to 30 minute intervals for a total of 1.5

mgm. Following the initial treatment in the emergency room he was admitted to the hospital.

The initial pyrexia and delirium subsided and the patient became oriented and coherent within the next few hours. The pupils decreased slightly and became sluggishly responsive but were still 7-8 mm in diameter 24 hours after admission. He was discharged home after approximately 24 hours with the only abnormal finding being the dilated, sluggish pupils.

Discussion

The use of naturally occurring hallucinogenic agents appears to be increasing in frequency with several recent reports of the use of these agents being found in the literature.^{1,14} The cases reported herein were all the result of seeking a "high".

The symptoms, as described in these cases, and in numerous case reports, bear a resemblance to the symptoms of cocaine overdose. No reference to the similarities of the two symptom complexes was found but interesting similarities of the structural formulae of atropine, scopolamine, and cocaine are noted, as well as the similarities in physical symptoms⁸.

The treatment, until recently, has been purely symptomatic but now a more or less specific antidote has become available along with protocols for its use. The cautious use of physostigmine (Antilirium®) in small incremental amounts has

been shown to be effective and to have minimal side effects.^{15,16}

References

1. Siegel, R.K.: Herbal Intoxication—Psychoactive Effects from Herbal Cigarettes, Tea and Capsules. *JAMA*, 236: 473-476, August 2, 1976.
2. DiGiacomo, J.N.: Toxic Effect of Stramonium Simulating LSH Trip. *JAMA*, 221:585-587, August 7, 1972.
3. Gowdy, M.M.: Stramonium Intoxication: Review of Symptomatology in 212 Cases. *JAMA*, 221:585-587, August 7, 1972.
4. Goodman, L.S. and Gilman, A.: *The Pharmacologic Basis of Therapeutics*, 4th Edition, Macmillan, NY 1970.
5. Eger, E.I.: Atropine, Scopolamine and Related Compounds. *Anesth* 23:365-383, May-June 1962.
6. Cullumbine, J., McKee, W.H.E. and Creasey, N.H.: The Effects of Atropine Sulphate Upon Healthy Male Subjects. *Q.J. Exp. Phys.* 40:309-319, 1955.
7. Domino, E.F. and Hudson, R.D.: Observations on the Pharmacological Actions of the Isomers of Atropine. *J. Pharm. and Exp. Ther.* 127:305-312, 1959.
8. Polson, C.J. and Tattersall, R.N.: *Clinical Toxicology*, 2nd Edition, J. B. Lippincott, Philadelphia, 1969.
9. Herxheimer, A.: A Comparison of Some Atropine-Like Drugs in Man with Particular Reference to Their End-Organ Specificity. *Brit. J. Pharmacol.* 13:184-192, 1958.
10. Thienes, C.H. and Haley, T.J.: *Clinical Toxicology*, 5th Edition, Les and Febiger, Philadelphia, 1972.
11. Hughes, J.D. and Clark, A.J. Jr.: Stramonium Poisoning—A Report of Two Cases. *JAMA* 112:250-2502, June 17, 1939.
12. Beeson, P.B. and McDermott, W.: *Textbook of Medicine*, 14th Edition, W. B. Saunders, Philadelphia, 1975.
13. Granacher, R.P., Baldessarini, R.J. and Messner, E.: Physostigmine Treatment of Delirium Induced by Anticholinergics. *AFP* 13:99-103, May 1976.
14. Mahler, D.A.: Anticholinergic Poisoning from Jimson Weed. *J.A.C.E.P.* 5:440-442, June 1976.
15. Johnson, P.B.: Physostigmine in Tricyclic Antidepressant Overdose. *J.A.C.E.P.* 5:443-445, June 1976.
16. Orr, P.: Reversal of Datura Stramonium Delirium with Physostigmine: Report of Three Cases. *Anesth and Analg Current Researches* 54:158, January-February, 1975.

Musculoskeletal Problems

(Continued from Page 433)

4. B.L. Broderick, "Orthopedic Medicine in General Practice: Survey of 244 Cases Seen Over a Year," *New Zealand Medical Journal*, LXXV (1972), 155-8.
5. D.M. Smith. "A Self-Employed Training Scheme in Orthopedic Surgery," *Journal Royal College General Practice*, XXII (1972), 483-6.
6. W. Grady Stumbo, "Primary Care: A Descriptive Approach", *J. K. Med. Assoc.* LXXIV (June, 1976), No. 6: 309-11.

Acknowledgements

Special note of thanks to the staff of East Kentucky Health Services Center for their support.

Hypertension Report Available

The Report of the Joint National Committee on Detection, Evaluation, and Treatment of High Blood Pressure is now available and may be ordered from the High Blood Pressure Information Center, 120/80 National Institutes of Health, Bethesda, Md. 20014. The Report gives a simple, economic approach to diagnosis and treatment of high blood pressure and gives guidance in the management and education of hypertensive patients.



GRAND ROUNDS



University of Louisville School of Medicine

This Journal feature will be presented alternately by the University of Louisville and the University of Kentucky Departments of Medicine and Departments of Surgery. We hope to have these features revolve around subjects of immediate practical interests to the practicing physician; and, for those of us not able to attend grand rounds in the teaching centers as often as we might, we hope this will represent a bit of a refresher course.

Pulmonary Infiltrates with Eosinophilia

ALLERGIC bronchopulmonary aspergillosis (ABPA) has been described much more frequently in Great Britain than it has in this country. It is a cause of pulmonary infiltrates in asthmatics and is part of the differential diagnosis of pulmonary infiltrates with eosinophilia. (PIE syndrome)

Case Report

A 33-year-old man presented to the Louisville Veterans Administration Hospital, December 14, 1976, with a several week history of progressive exertional dyspnea, cough productive of yellowish sputum, weakness, fatigue, and a 23-pound weight loss. There was no history of fever, chills, or expectoration of plugs of mucus. He had the onset of asthma as a child and had had intermittent attacks of wheezing since that time. He had taken Tedral® for his symptoms in the past and had never required hospitalization previously for his asthma. Exposure to dogs, cats, and spring pollens predictably produced exacerbations of his asthma, as did vigorous exertion. During his present illness he had seen a number of physicians and had received several unknown medications for his breathing in addition to Tetracycline. The physical examination was normal except for a mild tachycardia and diffuse bilateral inspiratory and expiratory rales and rhonchi. Admission laboratory data revealed a white blood count of 14,100 with 43% polymorphonuclear leukocytes (PMN), 1 non-segmented PMN, 24 lymphocytes, 28 eosinophils, and 4 monocytes. Arterial blood gases on room air showed pH of 7.40, pO₂ of 71.9, and pCO₂ of 37.2 mm Hg. Chest x-ray demonstrated diffuse, bilateral, alveolar, and interstitial infiltrates and thickening of the bronchial walls (Fig. 1). The initial impression was extrinsic asthma with pulmonary infiltrates of unknown etiology. Therapy with intravenous aminophylline, aerosolized Bronkosol®, and oral terbutaline gave some symptomatic improvement but diffuse wheezing persisted.

Subsequent laboratory investigation revealed stools for ova and parasites negative X 3. Four of five sputums cultured for fungus grew *Aspergillus fumigatus*. A skin test using *A. fumigatus* antigen, 1:1,000 wt/vol (Greer Laboratories, Lenoir, North Carolina) showed a 4+ im-

mediate wheel and flare reactions and was indurated approximately 100 mm/6 hrs. The serum IgE level was greater than 10,000 international units (iu)/ml compared to a normal value of less than 122 iu/ml. The radioallergosorbent test (RAST) for specific IgE antibodies to *A. fumigatus* was 2+ positive. The serum had precipitin antibodies to *A. fumigatus* demonstrated by double diffusion and a complement fixation titer positive at 1 to 8 dilution. A Wright stain of the sputum showed 2-3% eosinophils and a few mycelial forms were observed in two sputum smears. A presumptive diagnosis of ABPA was made and treatment with 60 mg of prednisone per day was initiated. Over the next 10 days he improved subjectively and objectively with decreased wheezing and his chest x-ray showed rather marked clearing (Fig. 2).

Before discussing ABPA in some detail, it might be appropriate to first consider the diagnostic possibilities in a patient presenting with pulmonary infiltrates and eosinophilia.

Differential Diagnosis

Among the earliest attempts to categorize the various entities comprising this syndrome was that of Crofton et. al.¹ whose grouping is shown in Table 1. It is primarily a classification based on clinical grounds rather than on etiological factors. These authors excluded from their classification Hodgkins disease, sarcoidosis, hydatid disease of the lung, and the resolving stage of bacterial pneumonia. The terms simple pulmonary eosinophilia or Löffler's syndrome are usually reserved for migratory pulmonary infiltrates associated with fever, few respiratory symptoms, at least a modest peripheral eosinophilia, and recovery within a month. The second group, prolonged pulmonary eosinophilia, includes those patients in which the pulmonary infiltrates persist for over a month. In general, the clinical presentation is not dissimilar from that of the simple pulmonary eosinophilia although the temperature



FIG. 1 PA chest x-ray of patient at time of admission showing increased bronchial markings, obstructive changes, and widely scattered infiltrates.

may be a bit more elevated and the patient seems a bit more likely to have severe symptoms. The radiographic appearance of the chest is quite variable, on occasion presenting a rather characteristic picture with a peripheral distribution of the infiltration which has been described as a photographic negative of pulmonary edema.² The degree of peripheral eosinophilia is also variable. In some instances, the eosinophilia is considerably higher than that seen in the simple pulmonary eosinophilia with counts which may range as high as 72% of the total white blood cell count. However, eosinophilia is not invariably present as noted in some of the patients of Liebow and Carrington.³ Some patients in this category will have spontaneous resolution of the illness, others may require treatment with corticosteroids particularly if there is no obvious etiology for the syndrome.

The third category proposed by Crofton et. al. was tropical eosinophilia. In this group there is an initial stage of malaise, fever, coryza, and dry cough lasting from one week to a month. Subsequently there is a so-called bronchitic phase in which cough is the prominent feature and this may last for months to years. This is followed by an asthmatic phase, again lasting for months

to years, in which wheezing is the prominent feature. In the majority of cases a chest x-ray will show abnormalities in the earlier stages of the disease.

Crofton et. al. originally made polyarteritis nodosa an individual classification. However, it is clear that other types of vasculitis such as Wegener's granulomatosis can present as a pulmonary infiltrate with eosinophilia. In this category of diseases the pulmonary manifestations are merely one aspect of a more generalized disease process.

So far we have mentioned very little about etiologic factors. In Table 2, an attempt is made to list some of the more common etiologic factors involved in producing pulmonary infiltrates with eosinophilia. It is obvious that one etiology could produce more than one clinical manifestation. For example, a nitrofurantoin reaction could persist for greater or less than one month depending on how long an individual persisted in taking the medication after the onset of the hypersensitivity reaction. It is also clear that someone living in the tropics could develop pulmonary infiltrates with eosinophilia because of taking any of the drugs listed in the table. In a substantial percentage of cases no etiological factor is identified. The patient presented here clearly appears to have the syndrome of ABPA which will now be discussed in more detail.

Discussion

The ubiquitous *Aspergillus* fungus has been blamed for causing at least five different types of pulmonary disease.^{5,6} (Table 3) The first type involves atopic or extrinsic asthmatics who develop IgE antibodies and positive immediate skin



FIG. 2 PA chest x-ray of patient three weeks after admission and after starting appropriate therapy.

Table 1

Classification of Pulmonary Infiltrates
with Eosinophilia*

- I Simple pulmonary eosinophilia-Löffler's syndrome
- II Chronic eosinophilic pneumonia
- III Tropical eosinophilia
- IV Pulmonary eosinophilia with asthma
- V Vasculitis

*Adapted from Crofton, et. al.¹

Table 2

Agents or Diseases Implicated in the Production of the PIE Syndrome*

- I Infections or infestations
 - A. Helminthic
 - 1. Ascaris
 - 2. Filaria
 - 3. *Ancylostoma braziliense*
 - B. Bacterial
 - 1. Brucellosis
 - 2. Tuberculosis
 - C. Fungal
 - 1. Coccidioidomycosis
 - 2. Histoplasmosis
 - 3. *Aspergillus*
- II Drugs or chemicals
 - A. Nitrofurantoin
 - B. Para amino salicylic acid
 - C. Penicillin
 - D. Sulfadimethoxine
 - E. Chlorpromamide
 - F. Carbamazepine
 - G. Smoke inhalation
 - H. Lymphangiogram (ethiodol)
- III Miscellaneous
 - A. Sarcoidosis
 - B. Hodgkins disease
 - C. Vasculitis
 - 1. Wegeners granulomatosis
 - 2. Polyarteritis nodosa
 - 3. Allergic granulomatosis of Churg and Strauss
 - D. Extrinsic allergic alveolitis
 - 1. Pigeon protein
 - 2. Dove protein
 - 3. Thermophilic actinomycetes
 - E. Hypereosinophilic syndrome

*Modified from Patterson, et. al⁴

tests to *Aspergilla* antigens. In these individuals, it is felt the *Aspergilla* airborne spores are one of possibly many aggravating factors involved in precipitating wheezing or bronchospasm. Treatment for this problem is the same as for other extrinsic asthmatics with environmental control, pharmacologic agents (bronchodilators, cromolyn, or steroids), and hyposensitization where indicated.

A second type involves the formation of a fungus ball or aspergilloma in individuals with underlying lung disease such as tuberculosis or other granulomatous disease. In this situation, the *Aspergillus* acts as an opportunistic organism which grows in a cavity or cyst already present in the lung due to the underlying lung disease. Here the *Aspergillus* grows into a ball of mycelia and exists as a saprophyte in the host and is non-invasive. Treatment modalities for this form of *Aspergillus* include appropriate treatment of the underlying lung disease and resection of the fungus ball if it is causing significant symptomatology. Amphotericin B may also be helpful in individual cases.

A third type of disease is the invasive form

where the organism becomes invasive into the pulmonary parenchyma and causes an infiltrating pneumonic process with destruction of tissue. This occurs in a setting of the immunologically comprised host such as transplant patients, neoplastic diseases, or in those on immunosuppressant drugs. The prognosis is grave and the patient frequently has an *Aspergillus* septicemia. Treatment is for the underlying condition and with Amphotericin B.

A fourth and apparently very rare type of disease is extrinsic allergic alveolitis due to the *Aspergillus*. This occurs in predominantly non-atopic patients and causes a clinical picture similar to other examples of extrinsic allergic alveolitis including farmer's lung, pigeon breeder's disease, maple bark disease, and bagassosis. These patients have dyspnea, dry cough, malaise, myalgia, rales, and diffuse micronodular pulmonary infiltrates all of which tend to occur four to eight hours after exposure to the causative agent and remit when the agent is avoided. Lung biopsy in these patients shows interstitial granulomatous infiltrations with lymphocytes, plasma cells, and macrophages. There is a very high serum precipitating (IgG, IgM) antibody and thymic dependent or T-lymphocyte sensitivity to the causative organism. The tissue damage in this disease may be mediated by immune complexes (Gell & Coombs type III) or by cell mediated immunity (type IV) or both. *Aspergillus* has been shown to cause this syndrome in individuals exposed to moldy barley, oats, or malt.^{6,7} Treatment is avoidance of the causative agent and steroids for severe exacerbations.

A fifth type of lung disease caused by *Aspergillus*, and the one which applies to the patient presented, is that of allergic bronchopulmonary aspergillosis (ABPA). This is a very unique syndrome which presents with a constellation of clinical findings which was first described 25 years ago.⁸ The syndrome is felt to be most prevalent in Europe although a number of series have recently been reported in this country.⁹⁻¹¹ It typically presents in a patient with an atopic background and previous history of extrinsic asthma who then develops increasingly severe and sometimes intractable asthma with recurrent pulmonary infiltrates. Careful study of the patient may then reveal any or all of the findings listed in Table 4.

Rosenberg recently proposed a clinical criteria for the diagnosis of APBA and suggested that

Table 3
Pulmonary Disease Caused by Aspergillus

| Disease | Characteristic | Immune Status |
|--|---|--|
| Extrinsic Asthma | Atopic history Asthma on exposure to Allergens (inc. Aspergillus) | IgE antibodies to Aspergillus |
| Aspergilloma | Fungus ball found in pre-existent cavities or cysts | Very high IgG and IgM antibodies to Asper- gillus |
| Invasive Aspergillosis | Disseminated fungus with pneumonitis and septicemia | Immunologically compromised host, e.g. leukemia or patients on immunosuppres- sants |
| Extrinsic Allergic Alveolitis | Typical delayed pul- monary symptoms on exposure to inhaled spores or dust | High antibody titers of IgG and IgM class and possibly sensitized lymphocytes to aspergillus |
| Allergic Bronchopulmonary Aspergillosis | Extrinsic asthmatics who develop pulmonary infiltrates and high eosinophilia | Very high total and specific IgE antibodies High specific IgG and IgM antibodies to aspergillus |

any six of the first seven clinical findings listed in Table 4 were enough to make a definite diagnosis.¹¹ The patient presented in this discussion had the first six criteria listed and chest x-ray suggested proximal bronchial disease although a bronchogram was not done. Particularly striking features in this patient were the peripheral eosinophilia (28%), extremely high serum IgE (greater than 10,000 i.u.), pulmonary infiltrates, and early and late or biphasic skin response to the *A. fumigatus* antigen.

The pathophysiology of ABPA hasn't been completely worked out but it is thought that the disease begins with the inhalation and trapping of Aspergillus spores in the thick viscid secretions of the asthmatic.⁶ The spores then may grow and germinate to form mycelia which exists in the bronchial lumen and on the mucosal surface and continually shed antigens into the tissues. The patient has IgE antibody to this antigen on the mast cells located in the bronchial walls which release histamine, slow reacting substances of anaphylaxis (SRS-A), and eosinophil chemotactic factor of anaphylaxis (ECF-A) which cause bronchospasm and increased bronchial secretions. Since the patient is constantly exposed to the antigen, he also develops very high IgG and IgM antibody levels against the antigen which can bind with the antigen forming antigen-antibody immune complexes. These can then cause tissue destruction by activation of complement and inflammatory cells, particularly neutrophils. Many authors, then, believe the above sequence of events lead to the clinical picture and believe it

is caused by a combination of IgE sensitivity (Gell and Coombs type I) and immune complex deposition (Gell and Coombs type III).^{5,6,11} This dual mechanism is also thought to explain the biphasic skin test and bronchial challenge with the IgE mechanism causing the immediate response and the immune complexes causing the late reaction. Recently there has also been speculation that cell mediated hypersensitivity (Gell and Coombs type IV) may also have a role in this disease as supported by the findings of granulomas and mononuclear cell infiltrates in some of the lesions and positive lymphocyte transformation studies to *Aspergilla* antigens in some of these patients.¹¹⁻¹³

A number of treatment modalities have been used for this disorder including antifungal agents

Table 4
Clinical Features of Allergic Bronchopulmonary Aspergillosis

Extrinsic asthma
Blood eosinophilia
Very high total serum IgE
Pulmonary infiltrates
Immediate (15-30 minutes) skin test for Aspergillus
Precipitating (IgG and IgM) antibodies to Aspergillus
Central bronchiectasis

Aspergillus consistently cultured from sputum
Expectoration of thick purulent sputum (brown plugs)
Late (Arthus) skin test to Aspergillus antigen
Dual or biphasic bronchial challenge response
Demonstration of mycelia in sputum
Sputum eosinophilia
Mucoid impaction

(clotrimazole¹⁴, natamycin¹⁵, nystatin¹⁶, and amphoterecin B¹⁰), sodium cromolyn¹⁷, and steroids. Most authorities believe that systemic corticosteroids are the best treatment and they frequently have to be used for long periods, perhaps even life-long therapy.¹¹ They should be tapered slowly to low dose alternate day therapy, if possible. Corticosteroids have been shown to stop the infiltrates, relieve airway obstruction, reduce antibody levels, and decrease the viscid sputum production which allows more effective removal of the fungus from the bronchi.⁶ In addition, every attempt should be made to reduce the patient's exposure to this and other airborne fungi and the bronchospasm must be treated with good bronchodilator therapy.

The long-term prognosis is generally thought to be favorable despite the need for long-term steroids. A recent report, however, indicates the prognosis may be more grave than expected as three patients in a group of 30 died of pulmonary insufficiency.¹⁸ The steroid therapy and the potentially serious consequences of this disorder make long-term, close follow-up of patients mandatory.

Hobert L. Pence, M.D.
Harvey L. Snider, M.D.

References

1. Crofton, J.W., Livingstone, J.L., Oswald, N.L., and Roberts, A.T.M., *Thorax* 7:1-35, 1952.
2. Carrington, C.B., Addington, W.W., Goff, A.M., Maloff, I.M., Marks, A., Schwaber, J.R., and Gaensler, A.E., *NEJM* 280:787-789, 1969.
3. Liebow, A.A., and Carrington, C.B., *Medicine* 48:251-285, 1969.
4. Patterson, R., Irons, J.S., Kelly, J.F., Mattson, J.R., and Oh, S.H., *J. of Allergy and Clinical Immunology* 58: 245-255, 1974.
5. Pepys, J.: Hypersensitivity diseases of the lungs due to fungi and organic dusts. *Monographs in Allergy*, Vol. 4, Basel, S. Karger, 1969.
6. Slavin, R.G.: Immunologically mediated lung diseases. *Postgraduate Medicine* 59:137-141, 1976.
7. Yocum, W.M., Saltzman, A.R., Strong, D.M., et. al.: Extrinsic Allergic alveolitis after *Aspergillus fumigatus* inhalation. *Am. J. Med.* 54:16-22, 1973.
8. Hinson, K.F.W., Moon, A.J., and Plummer, N.S.: Bronchopulmonary aspergillosis. A review and a report of eight new cases. *Thorax* 7:317-333, 1952.
9. Hoehne, J.H., Reed, C.E., and Dickie, H.A.: Allergic bronchopulmonary aspergillosis is not rare. *Chest* 63:177-181, 1973.
10. Slavin, R.G., Million, L., and Cherry, J.: Allergic bronchopulmonary aspergillosis: characterization of antibodies and results of treatment. *J. Allergy* 46:150-155, 1970.
11. Rosenberg, M., Patterson, R., Mintzer, R., et. al.: Clinical and immunologic criteria for the diagnosis of allergic bronchopulmonary aspergillosis. *Ann. Intern. Med.* 86:405-414, 1977.
12. Chan-Yeung, M., Chase, W.H., Trap, W., et. al.: Allergic bronchopulmonary aspergillosis. Clinical and pathologic study of three cases. *Chest* 59:33-39, 1971.
13. Warnock, M.L., Fennessy, M.D., and Rippon, J.: Chronic eosinophilic pneumonia, a manifestation of allergic aspergillosis. *Am. J. Clin. Pathol.* 62:73-81, 1974.
14. Crompton, G.K., Milne, L.J.R.: Treatment of bronchopulmonary aspergillosis with clotrimazole. *Br. J. Dis. Chest* 67:301-307, 1973.
15. Henderson, A.H., Pearson, J.E.G.: Treatment of bronchopulmonary aspergillosis with observations on the use of natamycin. *Thorax* 23:519-523, 1968.
16. Stark, J.E.: Allergic pulmonary aspergillosis successfully treated with inhalation of nystatin. Report of a case. *Dis. Chest* 51:96-99, 1967.
17. Safirstein, B.H., D'Souza, M., Simon, G., et. al.: Five year follow-up of allergic bronchopulmonary aspergillosis. *Am. Rev. Resp. Dis.* 108:450-459, 1973.
18. Imbeau, S., Nichols, D., duPico, G., et al.: The effects of prednisone therapy for allergic aspergillosis on disease activity, IgE, precipitins, and pulmonary function. Abstract #146. American Congress of Allergy and Immunology Meeting, New York, N.Y., March, 1977.

Letter to the Editor

Dear Editor:

An interest has been expressed by some individuals performing gastrointestinal endoscopy in Kentucky to form an organization which would hold meetings for the exchange of ideas and cases.

A meeting for this purpose has been scheduled on Tuesday, September 27, during the Kentucky Medical Association meeting in Louisville. The organizational meeting will include lunch and will be held at the Holiday Inn East, immediately across I-64 from the Bluegrass Convention Center and on the same side of Hurstbourne Lane as the Convention Center.

The luncheon will have a cash bar and cash buffet, and a representative of the American Society of Gastrointestinal Endoscopy will be present. Those throughout the state who are interested in the concept of this organization are encouraged to attend.

Any endoscopist unable to attend this meeting but interested in being part of a regional endoscopic society is encouraged to send me a note so that he can be retained on the mailing list as plans progress.

Robert G. Overstreet, M.D.
870 Medical Towers South
Louisville, Kentucky 40202

From The Editor's Notebook

Advertising the Advertisement

In the June 27, 1977, issue of *The New Yorker*, there appeared in the book review section an advertisement of interest. It urged in bold type headlines to "subscribe to the health letter with a Harvard degree" and as it turns out the newsletter, which is written for the general public, is published by the faculty of The Harvard Medical School. The bottom one-fourth of the advertisement is a subscription clip-out and for \$10 you get 12 issues, each issue a six-page report on medical subjects of interest.

I have just received my issue for this month, volume II, number 8, and have been favorably impressed by previous issues all the way back to volume I, number 1. The subjects are of concern to patients and I frequently show them my copy or may photocopy an issue and place it in the reception room. The last issue had articles on blood clots, coronary by-pass, and a Status Report on Vitamin E. The last one could save you words and time.

Other Journals

In the *Journal of the American Medical Association* (Volume 237 (26) 2819—June 27, 1977) a group writes of Antibiotic Use at Duke University Medical Center and "showed that 34.2% of all patients received antibiotics (43.6% surgical, 21.4% medical patients)" and "... showed 64% of total antibiotic therapy as not indicated or inappropriately administered in terms of drug or dosage." That 64% was most impressive and the report emphasizes "the need for continued education of prescribing physicians."

I have returned several times to the February 3, 1977, issue of the *New England Journal of Medicine* to read (in the section on Physiology of Medicine) Solomon H. Snyder's article entitled "Opiate Receptors in the Brain." It was a bit heavy (for me) but the load was eased and my comprehension of the subject improved after reading Richard Restak's article, "The Brain Makes Its Own Narcotics" in the March 5, 1977, issue of the *Saturday Review*. The subtitle, "Clues to the mysteries of pain, addiction and mental illness lie in an astounding new family of psycho-

chemicals" is an indication of the content that helped me understand Snyder's article.

Another Journal

The American Diabetes Association (ADA) announces the publication of a new bimonthly journal: *Diabetes Health Care* and the first issue will be January-February 1978. This new journal will be for "all professionals active in investigation, care, management and education of patients with diabetes and related disorders." It is encouraging to read about education of the patient since this is an area of great importance; the success of treatment in most diabetics depends heavily on their knowledge of the disease. *Diabetes Forecast*, a publication of the ADA for diabetic patients helps greatly in this regard. And what is to be the role of *Diabetes*, the official journal of ADA, an outstanding publication under the editorship of David Kipnis?

Tobacco Talk—Again

The Morbidity and Mortality Weekly Report from the Center for Disease Control for June 10, 1977, discusses (under Current Trends) the subject of smoking behavior and attitudes of physicians, dentists, nurses, and pharmacists. Therein are some interesting facts and figures:


1) physicians who smoked dropped from 30% in 1967 to 21% in 1975;

2) physicians smoke less than the adult population as a whole;

3) physicians generally and increasingly see cigarette smoking as a cause of heart disease and oral cancer and as either a major or contributing cause of lung cancer, chronic bronchitis, and pulmonary emphysema;

4) most physicians feel it is their role to set a good example by not smoking and their responsibility to convince people to stop smoking.

And the World Health Organization has stated again "smoking related diseases are such important causes of disability and premature death in the developed countries that the control of cigarette smoking could do more to improve health and prolong life in these countries than any single action in the whole field of preventive medicine.



Natural balance doesn't always come naturally

Big Balanced Rock, Chiricahua Mountains, Arizona (approx 1,000 tons)

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INDICATIONS. Based on a review of this drug by the National Academy of Sciences—National Research Council and/or other information, FDA has classified the indications as follows:

Effective: Management of nausea and vomiting and dizziness associated with motion sickness.

Possibly Effective: Management of vertigo associated with diseases affecting the vestibular system.

Final classification of the less than effective indications requires further investigation.

CONTRAINDICATIONS. Administration of Antivert (meclizine HCl) during pregnancy or to women who may become pregnant is contraindicated in view of the teratogenic effect of the drug in rats.

The administration of meclizine to pregnant rats during the 12-15 day of gestation has produced cleft palate in the offspring. Limited studies using doses of over 100 mg./kg./day in rabbits and 10 mg./kg./day in pigs and monkeys did not show cleft palate. Congeners of meclizine have caused cleft palate in species other than the rat.

Meclizine HCl is contraindicated in individuals who have shown a previous hypersensitivity to it.

WARNINGS. Since drowsiness may, on occasion, occur with use of this drug, patients should be warned of this possibility and cautioned against driving a car or operating dangerous machinery.


Usage in Children: Clinical studies establishing safety and effectiveness in children have not been done; therefore, usage is not recommended in the pediatric age group.

Usage in Pregnancy: See "Contraindications."

ADVERSE REACTIONS. Drowsiness, dry mouth and, on rare occasions, blurred vision have been reported.

More detailed professional information available on request.

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Before prescribing, see complete prescribing information in SK&F Co. literature or PDR. Brief summary follows:

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This drug is not indicated for initial therapy of edema or hypertension. Edema or hypertension requires therapy titrated to the individual. If this combination represents the dosage so determined, its use may be more convenient in patient management. Treatment of hypertension and edema is not static, but must be reevaluated as conditions in each patient warrant.

Indications: When the combination represents the dosage determined by titration: Adjunctive therapy in edema associated with congestive heart failure, hepatic cirrhosis, the nephrotic syndrome. Corticosteroid and estrogen-induced edema, idiopathic edema; hypertension, when the potassium sparing action of triamterene is warranted. (See Box Warning.) Routine use of diuretics in healthy pregnant women is inappropriate; they are indicated in pregnancy only when edema is due to pathological causes.

Contraindications: Further use in anuria, progressive renal or hepatic dysfunction, hyperkalemia. Pre-existing elevated serum potassium. Hypersensitivity to either component or other sulfonamide-derived drugs.

Warnings: Do not use potassium supplements, dietary or otherwise, unless hypokalemia develops. If dietary intake of potassium is markedly impaired, supplementary potassium is needed, potassium salts should not be used. Hyperkalemia can occur, and has been associated with cardiac irregularities. It is more likely in the severely ill, with urine volume less than one liter/day, the elderly and diabetics with suspected or confirmed renal insufficiency. Periodically, serum K^+ levels should be determined. If hyperkalemia develops, substitute a diuretic alone, restrict K^+ intake. Associated prolonged QRS complex or arrhythmia requires prompt additional therapy. Thiazides cross the placental barrier and appear in cord blood. Use in pregnancy requires weighing anticipated benefits against possible hazards, including fetal or neonatal jaundice, thrombocytopenia, other adverse reactions seen in adults. Thiazides appear and triamterene may appear in breast milk. If their use is essential, the patient should stop nursing. Adequate information on use in children is not available.

Precautions: Do periodic serum electrolyte determinations (particularly important in patients vomiting excessively or receiving parenteral fluids).

Periodic BUN and serum creatinine determinations should be made, especially in the elderly, diabetics or those with suspected or confirmed renal insufficiency. Watch for signs of impending coma in severe liver disease. If spironolactone is used concomitantly, determine serum K^+ frequently; both can cause K^+ retention and elevated serum K^+ . Two deaths have been reported with such concomitant therapy (in one, recommended dosage was exceeded, in the other serum electrolytes were not properly monitored). Observe regularly for possible blood dyscrasias, liver damage, other idiosyncratic reactions. Blood dyscrasias have been reported in patients receiving triamterene, and leukopenia, thrombocytopenia, agranulocytosis, and aplastic anemia have been reported with thiazides. Triamterene is a weak folic acid antagonist. Do periodic blood studies in cirrhotics with splenomegaly. Antihypertensive effect may be enhanced in post-sympathectomy patients. Use cautiously in surgical patients. The following may occur: transient elevated BUN or creatinine or both, hyperglycemia and glycosuria (diabetic insulin requirements may be altered), hyperuricemia and gout, digitalis intoxication (in hypokalemia), decreasing alkali reserve with possible metabolic acidosis.

'Dyazide' interferes with fluorescent measurement of quinidine.

Adverse Reactions:

Muscle cramps, weakness, dizziness, headache, dry mouth; anaphylaxis, rash, urticaria, photosensitivity, purpura, other dermatological conditions;

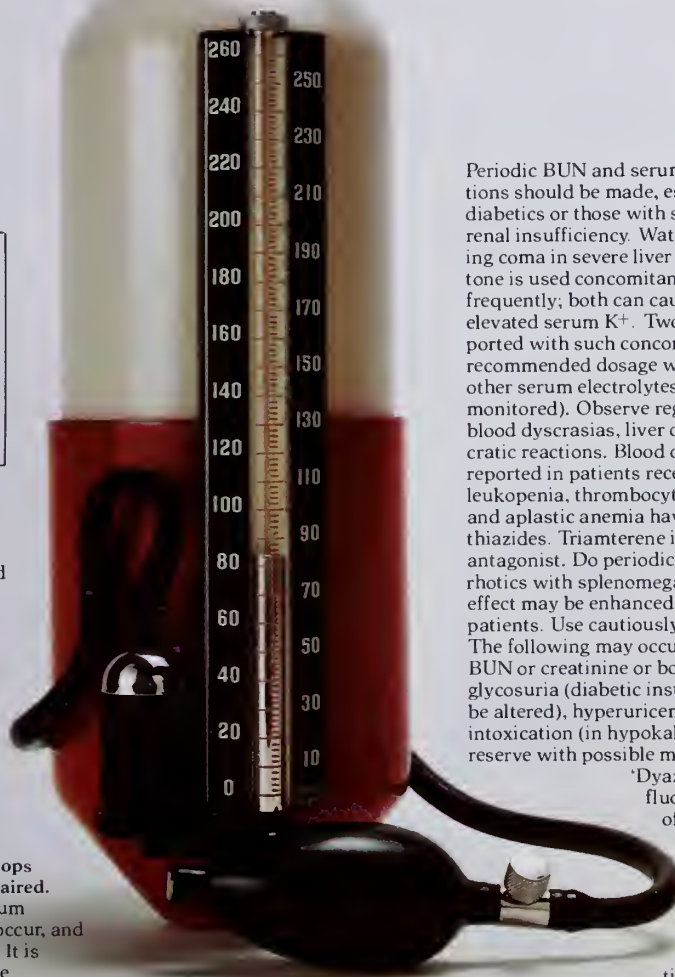
nausea and vomiting, diarrhea, constipation, other gastrointestinal disturbances. Necrotizing vasculitis, paresthesias, icterus, pancreatitis, xanthopsia and, rarely, allergic pneumonitis have occurred with thiazides alone.

Supplied: Bottles of 100 and 1000 capsules; Single Unit Packages of 100 (intended for institutional use only).

**FOR LONG-TERM CONTROL
OF HYPERTENSION*
SERUM K^+ AND BUN SHOULD
BE CHECKED PERIODICALLY.
(SEE WARNINGS SECTION.)**

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EMPRACET® with Codeine Phosphate, 60 mg, No. 4 ©

EMPRACET® with Codeine Phosphate, 30 mg, No. 3 ©

CONTRAINDICATIONS: Hypersensitivity to acetaminophen or codeine.

WARNINGS: Drug dependence. Codeine can produce drug dependence of the morphine type and may be abused. Dependence and tolerance may develop upon repeated administration; prescribe and administer with same caution appropriate to oral narcotics. Subject to the Federal Controlled Substances Act.

Usage in ambulatory patients. Caution patients that these products may impair mental and/or physical abilities required for performance of potentially hazardous tasks such as driving a car or operating machinery.

Interaction with other CNS depressants. Patients receiving other narcotic analgesics, general anesthetics, phenothiazines, tranquilizers, sedative-hypnotics, or other CNS depressants (including alcohol) may exhibit additive CNS depression; when used together reduce dose of one or both.

Usage in Pregnancy. Safe use is not established. Should not be used in pregnant patients unless potential benefits outweigh possible hazards.

PRECAUTIONS: Head injury and increased intracranial pressure. Respiratory depressant effects of narcotics and their capacity to elevate cerebrospinal fluid pressure may be markedly exaggerated in the presence of head injury, other intracranial lesions or a pre-existing increase in intracranial pressure. Narcotics produce adverse reactions which may obscure the clinical course of patients with head injuries.

Acute abdominal condition. These products or other narcotics may obscure the diagnosis or clinical course of acute abdominal conditions.

Special risk patients. Administer with caution to certain patients such as elderly or debilitated patients and those with severe impairment of hepatic or renal function, hypothyroidism, Addison's disease, or prostatic hypertrophy or urethral stricture.

ADVERSE REACTIONS: Most frequently include lightheadedness, dizziness, sedation, nausea, and vomiting; more prominent in ambulatory than in nonambulatory patients; some may be alleviated if patient lies down; others include: euphoria, dysphoria, constipation and pruritus.

DRUG INTERACTIONS: CNS depressant effect may be additive with that of other CNS depressants. See Warnings.

For symptoms and treatment of overdosage and full prescribing information, see package insert.

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Each tablet contains: codeine phosphate,
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EDITORIAL

Liability Insurance and the Law — Our Future Course

The Kentucky Medical Malpractice Insurance Law that required all physicians and hospitals to carry malpractice insurance has been declared unconstitutional by the Kentucky Supreme Court in a unanimous decision. It was the first state Supreme Court decision striking down a mandatory insurance provision. In addition, the Patients' Compensation Fund, having the authority to borrow from the State's general revenues should the Fund be depleted, was also declared unconstitutional because it would commit future tax monies, according to the Court ruling. The plan was devastated when the Court stated that those invalid portions were so essential to the Patient's Compensation Fund that it could not stand without them and, thus, that section of the law was invalid in its entirety.

The section on Confidentiality was also struck down. The Court said it found the basic procedures to be well founded and not to be objectionable on constitutional grounds, but it was declared unconstitutional as its subject matter did not relate to the title of the Act, which made it in violation of Section 51 of the Kentucky Constitution. The title of the Act reached only such subjects as have some reasonable relationship to medical malpractice claims for insurance, and confidentiality was not germane to the subjects, in the opinion of the Court.

As a result of this ruling, everything we have worked for in terms of getting legislation and being agreeable to all interests has come to naught. There is nothing to show for an 18-month effort. Why should such a ruling occur when excellent legal counsel was used, and the Legislative Research Commission and others knowledgeable in the field agreed that the law would have no constitutional problems? It is hard to explain away just by saying, "it's a difference of opinion," and doubly hard to accept when new insurance markets had just started to open in Kentucky as a result of the law passed by the Legislature. What can be done now?

Trying to get a reversal of the entire ruling or even on those most vulnerable portions of the ruling would appear to be an exercise in futility. However, there is an opportunity to petition for a rehearing, and this has been done by KMA, KHA, and the Commissioner of Insurance. If this is unsuccessful, we must go back to the 1978 General Assembly with a new bill eliminating those sections in the Patients' Compensation Fund which the Supreme Court finds offensive and introduce the confidentiality section as a separate bill with a separate title.

There is approximately \$900,000 of physician money in the Patients' Compensation Fund, and there can be no refunds by the Insurance Commissioner or anything done with this money until its disposition is determined by the Franklin Circuit Court if the petition for rehearing is refused.

Of course there are other options available to the Supreme Court. It might set the matter down for re-argument and re-briefing or reconsider and modify its opinion in certain respects. During the time the Court is considering the petition for rehearing, the Patients' Compensation Fund will continue to grow as physicians and hospitals must continue to contribute to the Fund as required by law until the Supreme Court hands down its final decision.

Every effort must be made to hold on to this Fund as we would remain a year and a half ahead of the time in terms of malpractice problems, cost, and availability of insurance and keeping physicians in Kentucky if the money could be used for settlement of large claims. There is a need to find a method by which the State could keep the funds and have them set aside for claims that might be forthcoming between now and the next General Assembly. Then a new law could be passed with mechanisms to take over the Fund as it now exists for those who would be willing for it to happen. Or, the medical community could establish its own company and

take over the Patients' Compensation Fund forming an umbrella-type company. But how viable could such a company be without some backup or co-insurance to make up deficits created by excessive claims? Premiums for such co-insurance may be small if the Fund is large.

In the meantime, other alternatives must be considered. Those companies writing the majority of malpractice insurance coverage in Kentucky had reduced their coverage to \$100,000/300,000 when the Patients' Compensation Fund was enacted. Hopefully, they will again start writing \$200,000/600,000, which would ease the anxiety of many physicians in the State. In a recent survey with 880 Kentucky physicians responding, 75% do not have an "umbrella policy." However, some may want to go "bare." According to

the AMA, about 15% of all U. S. doctors are simply going without any malpractice insurance. Some may want to pool their resources and form an off-shore malpractice insurance company in Grand Cayman or Bermuda. Their financial weakness could be offset by the fact that the owners know one another and are able to weed out those policyholders most likely to be sued.

It is obvious that we must continue to seek ways of making malpractice insurance available and affordable. The actions of the consumer group appointed by the Governor as an insurance regulatory agency will be watched with interest.

THOMAS M. MARSHALL, M.D., Chairman
Ad Hoc Committee on Professional Liability Insurance



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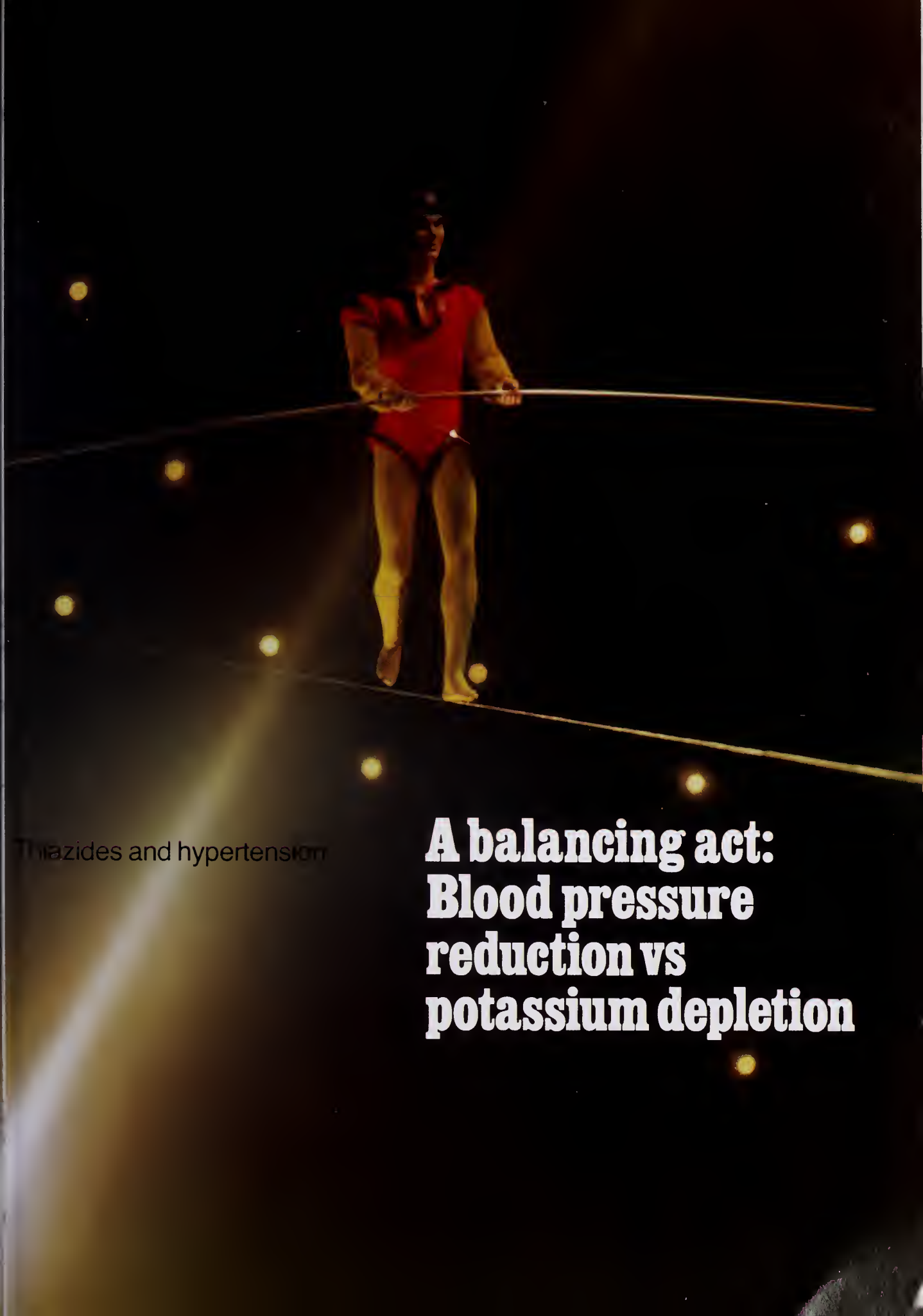
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Thiazides and hypertension

A balancing act: Blood pressure reduction vs potassium depletion

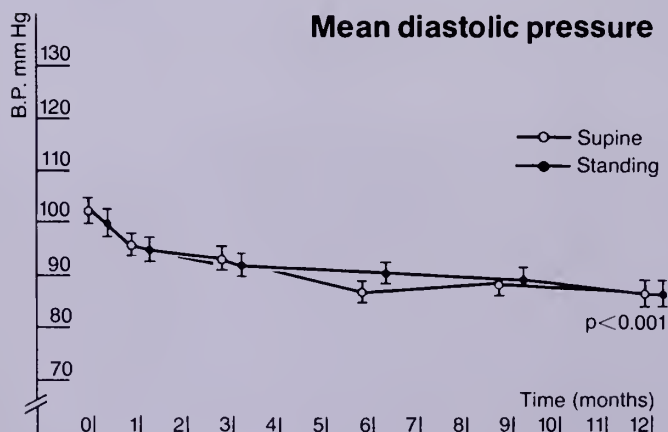
From a 1-year study of 18 patients
with mild uncomplicated
hypertension published in The Lancet*

Once a day

Naturetin®

Bendro-
flumethiazide
Tablets N.F.

Diastolic blood pressure down 12-15%



"The mean pretreatment blood pressure was 170/103 mmHg (supine) and 166/100 mmHg (standing). Diastolic pressure continued to fall over the first 6 months and then there was no further change up to 1 year...The mean blood pressure at 12 months was 153/88 mmHg (supine) and 142/88 mmHg (standing)."

"The patients were receiving a single daily dose of 10 mg bendrofluazide [bendroflumethiazide]...there were no apparent side effects from the medication."

*Wilkinson PR et al: The Lancet 1:759-762, 1975.



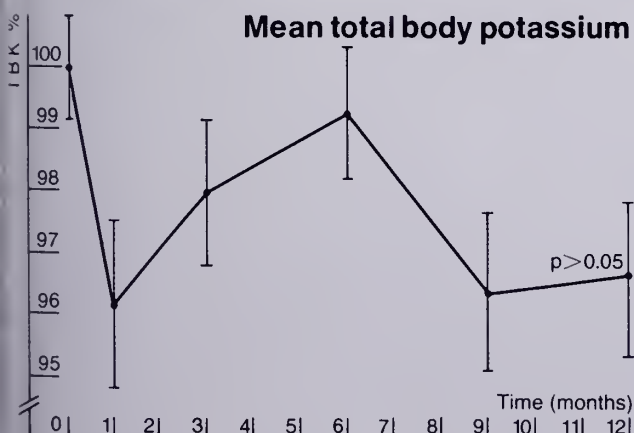
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Naturetin[®]

Bendro-
flumethiazide
Tablets N.F.

2.5, 5 and 10 mg

Potassium stabilized at 96% mean TBK



"The amount of potassium loss during the period of study did not seem to be clinically significant."

"A serum potassium of less than 3.5mmol per litre is often taken as the value below which potassium supplements should be given...At an arbitrary lower value for serum potassium of 3.0mmol per litre, few patients, our data suggest, would need potassium supplements. Our findings with TBK support this view..."

See next page for full prescribing information.

Once a day Naturetin® Bendroflumethiazide Tablets N.F.

NATURETIN®-2.5

NATURETIN®-5

NATURETIN®-10

Bendroflumethiazide Tablets N.F.

DESCRIPTION

Naturetin (Bendroflumethiazide Tablets N.F.) is a benzothiadiazine derivative containing a benzyl and a trifluoromethyl group. It is a potent oral diuretic and antihypertensive agent available as compressed tablets providing 2.5, 5.0, or 10 mg. bendroflumethiazide.

ACTIONS

The mechanism of action results in an interference with the renal tubular mechanism of electrolyte reabsorption. At maximal therapeutic dosage all thiazides are approximately equal in their diuretic potency. The mechanism whereby thiazides function in the control of hypertension is unknown.

INDICATIONS

Naturetin (Bendroflumethiazide Tablets N.F.) is indicated as adjunctive therapy in edema associated with congestive heart failure, hepatic cirrhosis and corticosteroid and estrogen therapy.

Bendroflumethiazide has also been found useful in edema due to various forms of renal dysfunction such as: nephrotic syndrome, acute glomerulonephritis, and chronic renal failure.

Naturetin (Bendroflumethiazide Tablets N.F.) is indicated in the management of hypertension either as the sole therapeutic agent or to enhance the effectiveness of other antihypertensive drugs in the more severe forms of hypertension.

Usage in Pregnancy. The routine use of diuretics in an otherwise healthy woman is inappropriate and exposes mother and fetus to unnecessary hazard. Diuretics do not prevent development of toxemia of pregnancy, and there is no satisfactory evidence that they are useful in the treatment of developed toxemia.

Edema during pregnancy may arise from pathological causes or from the physiologic and mechanical consequences of pregnancy. Thiazides are indicated in pregnancy when edema is due to pathologic causes, just as they are in the absence of pregnancy (see WARNINGS). Dependent edema in pregnancy, resulting from restriction of venous return by the expanded uterus, is properly treated through elevation of the lower extremities and use of support hose; use of diuretics to lower intravascular volume in this case is illogical and unnecessary. There is hypervolemia during normal pregnancy which is harmful to neither the fetus nor the mother (in the absence of cardiovascular disease), but which is associated with edema, including generalized edema, in the majority of pregnant women. If this edema produces discomfort, increased recumbency will often provide relief. In rare instances, this edema may cause extreme discomfort which is not relieved by rest. In these cases, a short course of diuretics may provide relief and may be appropriate.

CONTRAINDICATIONS

Bendroflumethiazide is contraindicated in anuria.

It is also contraindicated in patients who have previously demonstrated hypersensitivity to it or other sulfonamide-derived drugs.

WARNINGS

Bendroflumethiazide should be used with caution in severe renal disease. In patients with renal disease, thiazides may precipitate azotemia. Cumulative effects of the drug may develop in patients with impaired renal function.

Thiazides should be used with caution in patients with impaired hepatic function or progressive liver disease, since minor alterations of fluid and electrolyte balance may precipitate hepatic coma.

Thiazides may be additive or may potentiate the action of other antihypertensive drugs. Potentiation occurs with ganglionic or peripheral adrenergic blocking drugs.

Sensitivity reactions may occur in patients with a history of allergy or bronchial asthma.

The possibility of exacerbation or activation of systemic lupus erythematosus has been reported.

Usage in Pregnancy. Thiazides cross the placental barrier and appear in cord blood. The use of thiazides in pregnant women requires that the anticipated benefit be weighed against possible hazards to the fetus. These hazards include fetal or neonatal jaundice, thrombocytopenia, and possibly other adverse reactions which have occurred in the adult.

Nursing Mothers. Thiazides appear in breast milk. If use of the drug is deemed essential, the patient should stop nursing.

PRECAUTIONS

Periodic determination of serum electrolytes to detect possible electrolyte imbalance should be performed at appropriate intervals.

All patients receiving thiazide therapy should be observed for clinical signs of fluid or electrolyte imbalance; namely, hyponatremia, hypochloremic alkalosis, and hypokalemia. Serum and urine electrolyte determinations are particularly important when the patient is vomiting excessively or receiving parenteral fluids. Medication such as digitalis may also influence serum electrolytes. Warning signs, irrespective of cause, are: dryness of the mouth, thirst, weakness, lethargy, drowsiness, restlessness, muscle pains or cramps, muscular fatigue, hypotension, oliguria, tachycardia, and gastrointestinal disturbances such as nausea and vomiting.

Hypokalemia may develop with thiazides as with any other potent diuretic, especially with brisk diuresis, when severe cirrhosis is present, or during concomitant use of corticosteroids or ACTH.

Interference with adequate oral electrolyte intake will also contribute to hypokalemia. Digitalis therapy may exaggerate metabolic effects of hypokalemia especially with reference to myocardial activity.

Any chloride deficit is generally mild and usually does not require specific treatment except under extraordinary circumstances (as in liver disease or renal disease). Dilutional hyponatremia may occur in edematous patients in hot weather; appropriate therapy is water restriction, rather than administration of salt except in rare instances when the hyponatremia is life threatening. In actual salt depletion, appropriate replacement is the therapy of choice.

Hyperuricemia may occur or frank gout may be precipitated in certain patients receiving thiazide therapy.

Insulin requirements in diabetic patients may be increased, decreased, or unchanged. Latent diabetes mellitus may become manifest during thiazide administration.

Thiazids may increase the responsiveness to tubocurarine.

The antihypertensive effects of the drug may be enhanced in the postsympathectomy patient.

Thiazides may decrease arterial responsiveness to norepinephrine. This diminution is not sufficient to preclude effectiveness of the pressor agent for therapeutic use. If emergency surgery is indicated, preanesthetic and anesthetic agents should be administered in reduced dosage.

If progressive renal impairment becomes evident, as indicated by a rising nonprotein nitrogen or blood urea nitrogen, a careful reappraisal of therapy is necessary with consideration given to withholding or discontinuing diuretic therapy.

Thiazides may decrease serum PBI levels without signs of thyroid disturbance.

ADVERSE REACTIONS

Gastrointestinal System: anorexia, gastric irritation, nausea, vomiting, cramping, diarrhea, constipation, jaundice (intrahepatic cholestatic jaundice), and pancreatitis.

Central Nervous System: dizziness, vertigo, paresthesia, headache, and xanthopsia.

Hematologic: leukopenia, agranulocytosis, thrombocytopenia, and aplastic anemia.

Dermatologic-Hypersensitivity: purpura, photosensitivity, rash, urticaria, and necrotizing angitis (vasculitis, cutaneous vasculitis).

Cardiovascular: orthostatic hypotension may occur and may be aggravated by alcohol, barbiturates or narcotics. **Other:** hyperglycemia, glycosuria, occasional metabolic acidosis in diabetic patients, hyperuricemia, allergic glomerulonephritis, muscle spasm, weakness, and restlessness.

Whenever adverse reactions are moderate or severe, thiazide dosage should be reduced or therapy withdrawn.

DOSAGE AND ADMINISTRATION

Therapy should be individualized according to patient response. This therapy should be titrated to gain maximal therapeutic response as well as the minimal dose possible to maintain that therapeutic response.

Diuretic: The usual dose is 5 mg. once daily, preferably given in the morning. To initiate therapy, doses up to 20 mg. may be given once daily or divided into two doses. A single daily dose of 2.5 to 5 mg. should suffice for maintenance.

Alternatively, intermittent therapy may be advantageous in many patients. By administering the preparation every other day or on a three to five day per week schedule, electrolyte imbalance is less likely to occur; however, the possibility still exists.

In general, the lowest dosage that achieves the therapeutic response should be employed.

Antihypertensive: The suggested initial dosage is 5 to 20 mg. daily. Maintenance dosage may range from 2.5 to 15 mg. per day, depending on the individual response of the patient. When the diuretic is used with other antihypertensive agents, lower maintenance doses for each drug are usually sufficient.

STORAGE

Store at room temperature; avoid excessive heat.

HOW SUPPLIED

2.5 mg. tablets in bottles of 100, 5 mg. tablets (scored) in bottles of 100 and 1000, and 10 mg. tablets (scored) in bottles of 100.

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ASSOCIATIONAL NEWS



You'll Want to Be A Part of the 1977 Annual Meeting September 26-27-28-29

The 1977 KMA Annual Meeting will officially get underway on Monday, September 26, when the first meeting of the House of Delegates is held at 9 a.m. in the Jeffersonian Room of the Ramada Inn-Hurstbourne Lane.

It was learned at press time that John H. Budd, M.D., President of the American Medical Association will be on hand to address the House at this first session on Monday.

The scientific program, which will begin on Tuesday morning in Bluegrass Convention Center, will feature many timely medical topics and nationally recognized speakers. Cardiovascular problems, cancer, and alcoholism are a few of the main themes to be discussed during the four general sessions.

Nineteen specialty groups will hold meetings in conjunction with the Annual Meeting on Tuesday and Thursday afternoons, beginning at 1:30 p.m. Meeting on Tuesday, September 27, will be the anesthesiologists, chest physicians, emergency physicians, pathologists, pediatricians, plastic and reconstructive surgeons, orthopedists, general surgeons, and urologists. Groups representing dermatology, ENT, family medicine, neurosurgery, obstetrics and gynecology, occupational medicine, internal medicine, allergy and clinical immunology, psychiatry, and public health will meet on Thursday afternoon, September 29.

The President's Luncheon, a traditional highlight of the Annual Meeting, will be held at 11:50 a.m., Wednesday, September 28 in the Banquet Area of Bluegrass Convention Center. Grady Nutt, a well known humorist and entertainer, will be this year's featured speaker. The Luncheon will also feature the presentation of KMA's top awards and the installation of the 1977-78 KMA President, John P. Stewart, M.D. Tickets for the Luncheon will be on sale at various locations at the Ramada Inn and Bluegrass Convention Center.

Other features of the 1977 Annual Meeting include the Annual Convention of the Auxiliary to KMA; the KEMPAC Seminar on Monday evening, September 26; over 80 scientific and technical exhibits; and alumni reunions of the University of Louisville School of Medicine.

Complete details of all facets of the 1977 Annual Meeting are featured in the August issue of *The Journal of KMA*.

Several miscellaneous meetings have been scheduled during the KMA Annual Session. The time, date and place of meetings planned at press time are listed below for your information.

Sunday, September 25

- 12:30 p.m. KMA Board of Trustees, Luncheon Meeting, Grand Republic Room, Bluegrass Convention Center

Monday, September 26

- 9:00 a.m. KMA House of Delegates, Jeffersonian Room, Ramada Inn
- 12:30 p.m. Reference Committee Chairmen, Luncheon, Majestic Room, Bluegrass Convention Center
- 2:00 p.m. Reference Committee Meetings, Island Queen and Idlewild Rooms, Cincinnati Room, Eclipse Room, Grand Republic Room, Delta Queen Room, Natchez Room, Bluegrass Convention Center
- 6:00 p.m. KEMPAC Reception, Banquet and Seminar, Banquet Area, Bluegrass Convention Center

Tuesday, September 27

- 12:00 noon KMA Executive Committee and Reference Committee Chairmen, Mark Twain Room, Ramada Inn
- 12:00 noon Kentucky Chapter, American College of Surgeons, Luncheon, Jeffersonian Room, Ramada Inn
- 12:00 noon Gastrointestinal Endoscopists, Organizational Meeting and Luncheon, Holiday Inn East
- 5:00 p.m. University of Louisville Alumni Reception, Plainview Racquet and Swim Club
- 5:30 p.m. KMA-AKMA Reception to Honor Presidents-Elect, Poolside, Ramada Inn
- 6:30 p.m. Kentucky Orthopaedic Society, Dinner, Louisville, Kentucky and Magnolia Rooms, Ramada Inn
- 6:30 p.m. Kentucky Chapter, American College of Chest Physicians, Dinner, Grand Republic Room, Bluegrass Convention Center

Wednesday, September 28

- 11:50 a.m. KMA President's Luncheon, Banquet Area, Bluegrass Convention Center

- 3:00 p.m. KMA Board of Trustees, Meeting and Dinner, Grand Republic Room, Bluegrass Convention Center
- 6:00 p.m. KMA House of Delegates, Banquet Area, Bluegrass Convention Center

Thursday, September 29

- 7:30 a.m. Maternal Mortality Study Committee, Breakfast Meeting, Room 200A, Ramada Inn
- 7:30 a.m. Kentucky Academy of Family Physicians, Insurance Commission, Breakfast Meeting, Kentucky Room, Ramada Inn
- 12:00 noon KMA Board of Trustees, Luncheon Meeting, Jeffersonian Room, Ramada Inn
- 12:00 noon Kentucky Occupational Medical Association, Luncheon, Magnolia Room, Ramada Inn
- 12:00 noon Kentucky Obstetrical and Gynecologic So-

ciety, Luncheon, Island Queen-Idlewild Rooms, Bluegrass Convention Center

12:00 noon Kentucky Psychiatric Association, Council Luncheon, Room 200A, Ramada Inn

KMGA Golf Tournament Scheduled Sept. 26

The Kentucky Medical Golf Association will hold its annual fall tournament on Monday, September 26, at the Audubon Country Club in Louisville.

Physicians may tee off at any time on that date and may make up their own game or find one at the course. Any physician interested in playing in the fall tournament should contact John M. Karibo, M.D., Suite 305, 2120 Newburg Road, Louisville, Ky. 40205 or call (502) 456-6200.

Reference Committee Activity

Speaker Carl Cooper, Jr., M.D., Bedford, will assign all officers' and committees' reports and resolutions to one of six Reference Committees at the first meeting of the KMA House of Delegates at 9:00 a.m., Monday, September 26. Briefing sessions for Reference Committee Chairmen will be held at 12:30 p.m., Monday, in the Majestic Room, Bluegrass Convention Center. Any KMA member wishing to testify on any resolution or report is urged to be present for the Reference Committee meetings which will be held at 2 p.m., Monday, September 26 at Bluegrass Convention Center. These open sessions will last one hour in order for all who wish to speak to be heard. Following the open hearings, the Committees will go into executive sessions to study the reports, review the testimony, and write their reports to the House.

The Committees' recommendations will be presented at the final session of the House, Wednesday evening, September 28 beginning at 6:00 p.m. in the Bluegrass Convention Center. Listed below are the Reference Committees as appointed by Doctor Cooper to serve during the 1977 session.

1977 Reference Committee Appointments

REFERENCE COMMITTEE NO. 1

Island Queen and Idlewild Rooms

Robert E. Smith, M.D., Covington, Chairman
Walter R. Brewer, M.D., Lexington
Peter C. Campbell, M.D., Louisville
Elmer H. Jackson, M.D., Danville
W. N. Richardson, M.D., Cadiz

REFERENCE COMMITTEE NO. 2

Cincinnati Room

Peter P. Bosomworth, M.D., Lexington, Chairman
Richard K. Jelsma, M.D., Louisville
W. E. Kozee, M.D., Ashland
William E. Pearson, M.D., Owensboro
R. D. Pitman, M.D., Williamsburg

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Fifteenth KEMPAC Seminar

Monday, September 27, 1977

6:00 p.m. EDT

Banquet Area

Ramada Inn—Bluegrass Convention Center



Otis R. Bowen, M.D., Governor
State of Indiana

Governor Bowen served 14 years as a member of the House of Representatives of the State of Indiana, four times Speaker, before his election as Indiana's Governor in 1972. In 1976 he was re-elected to serve through 1980. At the completion of this second term, he will be the first governor in Indiana's history to serve eight consecutive years.

He has served as a member of the National Legislative Conference's Intergovernmental Relations Committee and was the first recipient of the AMA Doctor Benjamin Rush Award. This award is presented to physicians who have made outstanding contributions to the community in the area of citizenship and public service.

The key to good government is electing the right people to office. Governor Bowen will discuss how politics affects medicine and how medicine affects politics. Malpractice insurance will also be discussed.

Tickets are \$15 and your check should be sent, along with the coupon below, to KEMPAC, 3532 Ephraim McDowell Drive, Louisville, Ky. 40205.

Name _____

Address _____

Please send _____ tickets (8 spaces at a table).

Enclosed is my check for \$_____.

Reservations must be in by Wednesday, September 21.

Seminars to Deal with Revision Of Kentucky's Constitution

Ten seminars have been scheduled throughout the state by the Legislative Research Commission to inform the public on the question of holding a constitutional convention in Kentucky.

Since this question will appear on the November, 1977, ballot, the Commission is hopeful the seminars will bring this issue before the voting public and answer questions concerning the revision of Kentucky's Constitution.

Seminars will be held as follows:

Sept. 8—Paducah, City Hall, 7:30 p.m.

Sept. 9—Owensboro, City Hall, 1:00 p.m.

Sept. 15—Bowling Green, Downing Center, Western Kentucky University, 7:30 p.m.

Sept. 16—Elizabethtown, Community College Science Aud., 1:00 p.m.

Sept. 22—Somerset, Community College Aud., 7:30 p.m.

Sept. 23—Prestonsburg, Community College Aud., 1:00 p.m.

Sept. 29—Ashland, City Hall, 7:30 p.m.

Sept. 30—Covington, City Hall, 1:00 p.m.

Oct. 7—Lexington, Civic Center, 1:00 p.m.

Oct. 14—Louisville, Burnham Hall, University of Louisville, 1:00 p.m.



Headquarters Activity

KMA had physicians and staff members in attendance at the following activities and events:

AUGUST

- 2 Sixth District Trustee Meeting, Bowling Green
- 4 Health Care Cost Council, Louisville
Subcommittee on Business Organizations and Professions, Frankfort
- 8 Journal Editors' Meeting Louisville
- 9 Subcommittee on Health and Welfare, Hearing on Laetrile, Frankfort
- 10 Executive Committee, Louisville
Awards Committee, Louisville
- 10-11 Board of Trustees, Louisville
- 17 Cancer Committee, Louisville
- 18 Fourth District Trustee Meeting, Bardstown
- 24 Judicial Council, Louisville
- 25 Committee on State Legislative Activities, Louisville

SEPTEMBER

- 1 Executive Committee, Louisville
- 12 Journal Editors' Meeting, Louisville
- 13 Tenth District Trustee Meeting, Lexington
- 14 McDowell House Board of Managers, Danville
- 16-17 State Medical Journal Advertising Bureau Conference, New Orleans
- 25-29 KMA Annual Meeting

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Did you know . . .

Doctor Carl Cooper and staff attended the August 9 hearing on laetrile being conducted by the Subcommittee on Health and Welfare. A brief statement that has been endorsed by the KMA Board of Trustees was presented by Doctor Cooper on the sale and use of laetrile. Highlights of this statement are as follows:

The KMA is unalterably opposed to the legalization of laetrile in Kentucky because:

- no known scientific evidence has been produced that shows laetrile has any therapeutic efficacy;

- recent studies conducted by Georgetown University (July 25, 1977) show strong toxicity levels;

- it would be a violation of professional ethics and a breach of faith with the patient for physicians to use untried drugs that are neither safe nor effective;

- legislation would give the public a false impression of the true effectiveness of laetrile which may keep them from seeking professional help;

- it may open the way to other worthless cures that unscrupulous promoters would use to take advantage of the public.

Staff was present at the August 4 meeting of the Subcommittee on Business Organizations and Professions in Frankfort. The Subcommittee was studying the maldistribution of physicians in Kentucky. Besides reviewing the number of medical school applications received from throughout the state, the Subcommittee also reviewed admission policies of the two state medical schools. The Subcommittee recommended that in the future Admission Committees be comprised of representatives from all parts of the state.



Members in the news

NEW MEMBERS

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BRIEF SUMMARY OF PRESCRIBING INFORMATION

ANTIMINTH® (pyrantel pamoate) ORAL SUSPENSION

Actions. Antiminth (pyrantel pamoate) has demonstrated anthelmintic activity against *Enterobius vermicularis* (pinworm) and *Ascaris lumbricoides* (roundworm). The anthelmintic action is probably due to the neuromuscular blocking property of the drug.

Antiminth is partially absorbed after an oral dose. Plasma levels of unchanged drug are low. Peak levels (0.05-0.13 $\mu\text{g/ml}$) are reached in 1-3 hours. Quantities greater than 50% of administered drug are excreted in feces as the unchanged form, whereas only 7% or less of the dose is found in urine as the unchanged form of the drug and its metabolites.

Indications. For the treatment of ascariasis (roundworm infection) and enterobiasis (pinworm infection).

Warnings. *Usage in Pregnancy:* Reproduction studies have been performed in animals and there was no evidence of propensity for harm to the fetus. The relevance to the human is not known.

There is no experience in pregnant women who have received this drug.

The drug has not been extensively studied in children under two years; therefore, in the treatment of children under the age of two years, the relative benefit/risk should be considered.

Precautions: Minor transient elevations of SGOT have occurred in a small percentage of patients. Therefore, this drug should be used with caution in patients with preexisting liver dysfunction.

Adverse Reactions. The most frequently encountered adverse reactions are related to the gastrointestinal system.

Gastrointestinal and hepatic reactions: anorexia, nausea, vomiting, gastralgia, abdominal cramps, diarrhea and tenesmus, transient elevation of SGOT.

CNS reactions: headache, dizziness, drowsiness, and insomnia. Skin reactions: rashes.

Dosage and Administration. *Children and Adults:* Antiminth Oral Suspension (50 mg of pyrantel base/ml) should be administered in a single dose of 11 mg of pyrantel base per kg of body weight (or 5 mg/lb.); maximum total dose 1 gram. This corresponds to a simplified dosage regimen of 1 ml of Antiminth per 10 lb. of body weight. (One teaspoonful=5 ml.)

Antiminth (pyrantel pamoate) Oral Suspension may be administered without regard to ingestion of food or time of day, and purging is not necessary prior to, during, or after therapy. It may be taken with milk or fruit juices.

How Supplied. Antiminth Oral Suspension is available as a pleasant tasting caramel-flavored suspension which contains the equivalent of 50 mg pyrantel base per ml, supplied in 60 ml bottles and Unitcups™ of 5 ml in packages of 12.

More detailed professional information available on request.

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Antiminth[®]
(pyrantel pamoate)

equivalent to 50 mg pyrantel/ml
ORAL SUSPENSION



a drug of choice in
pinworm infections

Please see brief summary of prescribing information on facing page.

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For recurrent attacks of urinary tract infection in women

Bactrim™ DS Double Strength Tablets

Each tablet contains 160 mg trimethoprim and 800 mg sulfamethoxazole.

Just one tablet b.i.d. for 10 to 14 days



- Action at urinary/vaginal/lower bowel sites helps eliminate reservoirs of infecting organisms
- Distinctive antibacterial action plus wide spectrum helps eradicate recurrent UTI
- Low incidence of bacterial resistance in community practice

- Convenient *b.i.d.* dosage provides day-and-night antibacterial control
- Contraindicated during pregnancy and the nursing period. During therapy, maintain adequate fluid intake; perform CBC's and urinalyses with microscopic examination.

Before prescribing, please consult complete product information, a summary of which follows:

Indications and Usage: For the treatment of urinary tract infections due to susceptible strains of the following organisms: *Escherichia coli*, *Klebsiella-Enterobacter*, *Proteus mirabilis*, *Proteus vulgaris*, *Proteus morganii*. It is recommended that initial episodes of uncomplicated urinary tract infections be treated with a single effective antibacterial agent rather than the combination. Note: The increasing frequency of resistant organisms limits the usefulness of all antibacterials, especially in these urinary tract infections.

Also for the treatment of documented *Pneumocystis carinii* pneumonitis. To date, this drug has been tested only in patients 9 months to 16 years of age who were immunosuppressed by cancer therapy.

The recommended quantitative disc susceptibility method (Federal Register, 37:20527-20529, 1972) may be used to estimate bacterial susceptibility to Bactrim. A laboratory report of "Susceptible to trimethoprim-sulfamethoxazole" indicates an infection likely to respond to Bactrim therapy. If infection is confined to the urine, "Intermediate susceptibility" also indicates a likely response. "Resistant" indicates that response is unlikely.

Contraindications: Hypersensitivity to trimethoprim or sulfonamides; pregnancy; nursing mothers; infants less than two months of age.

Warnings: Deaths from hypersensitivity reactions, agranulocytosis, aplastic anemia and other blood dyscrasias have been associated with sulfonamides. Experience with trimethoprim is much more limited but occasional interference with hematopoiesis has been reported as well as an increased incidence of thrombopenia with purpura in elderly patients on certain diuretics, primarily thiazides. Sore throat, fever, pallor, purpura or jaundice may be early signs of serious blood disorders. Frequent CBC's are recommended; therapy should be discontinued if a significantly reduced count of any formed blood element is noted.

Precautions: Use cautiously in patients with impaired renal or hepatic function, possible folate deficiency, severe allergy or bronchial asthma. In patients with glucose-6-phosphate dehydrogenase deficiency, hemolysis, frequently dose-related, may occur. During therapy, maintain adequate fluid intake and perform frequent urinalyses, with careful microscopic examination, and renal function tests, particularly where there is impaired renal function.

Adverse Reactions: All major reactions to sulfonamides and trimethoprim are included, even if not reported with Bactrim. **Blood dyscrasias:** Agranulocytosis, aplastic anemia, megaloblastic anemia, thrombopenia, leukopenia, hemolytic anemia, purpura, hypoprothrombinemia and methemoglobinemia. **Allergic reactions:** Erythema multiforme, Stevens-Johnson syndrome, generalized skin eruptions, epidermal necrolysis, urticaria, serum sickness, pruritus, exfoliative dermatitis, anaphylactoid reactions, periorbital edema, conjunctival and scleral injection, photosensitization, arthralgia and allergic myocarditis. **Gastrointestinal reactions:** Glossitis, stomatitis, nausea, emesis, abdominal pains, hepatitis, diarrhea and pancreatitis. **CNS reactions:** Headache,

peripheral neuritis, mental depression, convulsions, ataxia, hallucinations, tinnitus, vertigo, insomnia, apathy, fatigue, muscle weakness and nervousness. **Miscellaneous reactions:** Drug fever, chills, toxic nephrosis with oliguria and anuria, periarteritis nodosa and L. E. phenomenon. Due to certain chemical similarities to some goitrogens, diuretics (acetazolamide, thiazides) and oral hypoglycemic agents, sulfonamides have caused rare instances of goiter production, diuresis and hypoglycemia in patients; cross-sensitivity with these agents may exist. In rats, long-term therapy with sulfonamides has produced thyroid malignancies.

Dosage: Not recommended for infants less than two months of age.

Urinary Tract Infections: Usual adult dosage—1 DS tablet (double strength), 2 tablets (single strength) or 4 teasp. (20 ml) b.i.d. for 10-14 days.

Recommended dosage for children—8 mg/kg trimethoprim and 40 mg/kg sulfamethoxazole per 24 hours, in two divided doses for 10 days. A guide follows:

Children two months of age or older:

| Weight | | Dose—every 12 hours | |
|--------|-----|---------------------|--------------------------|
| lbs | kgs | Teaspoonfuls | Tablets |
| 20 | 9 | 1 teasp. (5 ml) | ½ tablet |
| 40 | 18 | 2 teasp. (10 ml) | 1 tablet |
| 60 | 27 | 3 teasp. (15 ml) | 1½ tablets |
| 80 | 36 | 4 teasp. (20 ml) | 2 tablets or 1 DS tablet |

For patients with renal impairment:

| Creatinine Clearance (ml/min) | Recommended Dosage Regimen |
|-------------------------------|----------------------------|
| Above 30 | Usual standard regimen |
| 15-30 | ½ the usual regimen |
| Below 15 | Use not recommended |

***Pneumocystis carinii* pneumonitis:** Recommended dosage: 20 mg/kg trimethoprim and 100 mg/kg sulfamethoxazole per 24 hours in equal doses every 6 hours for 14 days. See complete product information for suggested children's dosage table.

Supplied: Double Strength (DS) tablets, each containing 160 mg trimethoprim and 800 mg sulfamethoxazole, bottles of 100; Tel-E-Dose® packages of 100. Tablets, each containing 80 mg trimethoprim and 400 mg sulfamethoxazole—bottles of 100 and 500; Tel-E-Dose® packages of 100; Prescription Paks of 40, available singly and in trays of 10. Oral suspension, containing in each teaspoonful (5 ml) the equivalent of 40 mg trimethoprim and 200 mg sulfamethoxazole, fruit-licorice flavored—bottles of 16 oz (1 pint).



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Please see back cover.

Her next attack of cystitis may require

the BactrimTM 3-system counterattack



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Bactrim has shown high clinical effectiveness in recurrent cystitis as a result of its wide spectrum and distinctive antimicrobial action in the urinary, vaginal and lower intestinal tracts.

The probability of recurrent urinary tract infection appears to be enhanced by the establishment of large numbers of *E. coli* or other urinary pathogens on the vaginal introitus. The trimethoprim component of

Bactrim diffuses into vaginal fluid in effective concentrations, thus combating migration of pathogens into the urethra.

Studies have shown that Bactrim acts against *Enterobacteriaceae* in the bowel without the emergence of resistant organisms. Thus, Bactrim reduces the risk of introcolonization by fecal uropathogens. It has *no* significant effect on other normal, necessary intestinal flora.

Bactrim fights uropathogens in the urinary tract/vaginal tract/lower intestinal tract

Please see reverse side for summary of product information.

October 1977
Volume 75
Number 10

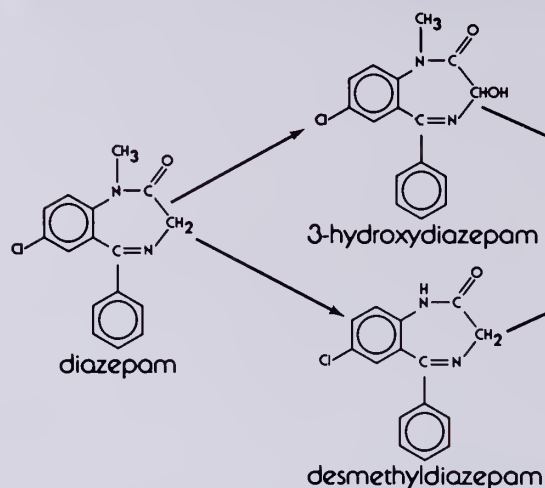
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A pharmacokinetic character all its own



Valium (diazepam) is a benzodiazepine with a distinctive pharmacokinetic profile

The pharmacokinetic profile of Valium is one of the characteristics that sets it apart from other benzodiazepines. Consider, in particular, the metabolic pathway of Valium. The three major metabolites of Valium exhibit significant pharmacologic activity—and so, of course, does the parent substance—diazepam itself. All combine to produce the characteristic clinical response seen with Valium. The response you have come to know, to want and to trust.

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Valium® (diazepam) ^{IV}

2-mg, 5-mg, 10-mg scored tablets
**a prudent choice in psychic
tension and anxiety**

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Tension and anxiety states; somatic complaints which are concomitants of emotional factors; psychoneurotic states manifested by tension, anxiety, apprehension, fatigue, depressive symptoms or agitation; symptomatic relief of acute agitation, tremor, delirium tremens and hallucinosis due to acute alcohol withdrawal; adjunctively in skeletal muscle spasm due

to reflex spasm to local pathology; spasticity caused by upper motor neuron disorders; athetosis; stiff-man syndrome; convulsive disorders (not for sole therapy).

Contraindicated: Known hypersensitivity to the drug. Children under 6 months of age. Acute narrow angle glaucoma;

may be used in patients with open angle glaucoma who are receiving appropriate therapy.

Warnings: Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anticonvulsant medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms (similar to those with barbiturates and alcohol) have occurred following abrupt discontinuance (convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). Keep addiction-prone individuals under careful surveillance because of their predisposition to habituation and dependence.

Usage in Pregnancy: Use of minor tranquilizers during first trimester should almost always be avoided because of increased risk of congenital malformations as suggested in several studies. Consider possibility of pregnancy when instituting therapy; advise patients to discuss therapy if they intend to or do become pregnant.

Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed; drugs such as phenothiazines, narcotics, barbiturates, MAO inhibitors and other antidepressants may potentiate its action. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.

Side Effects: Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.



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MESSAGE FROM THE PRESIDENT



The Fourth Branch of Government

Both Constitutions, national and state, established three branches of government: executive, legislative, and judicial. In reality today, a fourth exists—the bureaucracy with control through the power of licensure—with authority to write detailed regulations to accomplish protection of the public designed by the Legislature.

Nationally, Congress never reviews the regulations written to determine if its objective is determined in a reasonable fashion—an appalling void. Recently our Congressmen felt physicians composed 49% of the members on HSA Boards. On our state level, legislators review the regulations and hold hearings—a commendable attempt to control regulations. However, the agendas of the interim committee hearings are very loose in that items are deleted or brought up on a last minute basis without prior notice.

In regard to the Governor, it is humanly impossible for any one man to be aware of all the regulations the bureaucrats are writing. The bureaucrats on the other hand are skilled in their timing, often arrogant in attitude, operating under the banner of protecting the consumer.

Recently, state regulations regarding the certification of operators of x-ray machines and regulations for laboratory procedures in physicians' offices were issued. Both issues were defeated in the Legislature, yet the bureaucrats attempted, and may have accomplished, control through regulations.

Once again, the necessity of our participation in politics is emphasized. The elections are November 8. Contact your candidate for the Legislature, telling him or her you are for them, and request they stop the oppressive bureaucratic regulatory machine. Inform them prior to the election, if not in person or by telephone, then send a letter. Your views are important before an election—not as much afterward.

JOHN P. STEWART, M.D., President
Kentucky Medical Association

A Link in the Chain

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Mrs. Tom (Alma) Hall, Bowling Green, was installed as President of the Auxiliary to KMA during the Annual Convention held in September. She will be writing "A Link in the Chain" for The Journal during the 1977-78 Associational year.



"Build A Bridge—Not A Wall"

WHEN under attack, the usual response of human and animal alike is either that of fight or flight. Within recent years, under the attack of malpractice suits and the ever-increasing legislated government regulations, we have seen examples of both responses by physicians and their families. The response of fight is quite evident in physician strikes but perhaps is also evident in a more subtle fashion in the unrest within organized medicine. On the opposite end of the scale we view the response of flight: those who withdrew, an island unto themselves, and do not participate either with the community or with their fellow physicians and families.

Both of these responses—fight and flight—perhaps born of the same frustration, usually result inadvertently in the building of a wall.

I challenge each of us throughout the 1977-78 Auxiliary year to an alternate response: *Build a Bridge!* Admittedly somewhat idealistic in approach, it is at the very least a positive alternative. Examine with me the possibilities.

By definition, "A bridge is a structure erected over an obstacle to allow passage." Ideally it allows passage in both directions, remains open at all times, and is structurally sound enough to hold a maximum load. To build a bridge through Medical Auxiliary requires blueprints, showing a design and directions, and all members working together (just like the plumbers and electricians) each doing a separate job but in a cooperative effort.

I look forward to the opportunity of building a bridge with you this year—a bridge that has special properties in that it can be crossed verbally as well as physically but to do so requires skilled communications—an understanding of the issues, some talking, lots of listening—and always an attitude of caring.

MRS. TOM HALL, President
Auxiliary to KMA

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Cut it out.

Overeating could be shortening your life. Obesity has been linked to such ailments as high blood pressure, diabetes, hardening of the arteries, and stroke.

Even if you're not overweight, you need to eat a balanced diet. Cut down on foods high in fat, cholesterol and calories. Eat more fresh fruits and vegetables.

How you take care of yourself directly affects the cost of health care for all of us. In the long run, good health habits are the best form of health care...and the least expensive.

At Blue Cross and Blue Shield and Delta Dental of Kentucky, we're concerned about the cost of health care, and think there is no better health care plan than your own good health care habits. With all of us helping each of us, we can maintain quality health care at the lowest possible cost.

Write us for information on quality health care plans. Blue Cross and Blue Shield and Delta Dental of Kentucky, 9901 Linn Station Road, Louisville, KY 40223



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Each tablet contains 130 mg theophylline, 24 mg ephedrine hydrochloride, and 8 mg phenobarbital

Each tablet contains 180 mg anhydrous theophylline (90 mg in the immediate release layer and 90 mg in the sustained release layer), 48 mg ephedrine hydrochloride (16 mg in the immediate release layer and 32 mg in the sustained release layer); and 25 mg phenobarbital in the immediate release layer

Each 5 ml teaspoonful contains 32.5 mg theophylline, 6 mg ephedrine HCl, and 2 mg phenobarbital, the alcohol content is 15%.

See next page for brief summary.

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TEDRAL® SA Sustained Action

TEDRAL® Elixir

CAUTION: Federal law prohibits dispensing Tedral SA without prescription.

Description. Tedral: each tablet contains 130 mg theophylline, 24 mg ephedrine hydrochloride, and 8 mg phenobarbital.

Tedral SA: each tablet contains 180 mg anhydrous theophylline (90 mg in the immediate release layer and 90 mg in the sustained release layer); 48 mg ephedrine hydrochloride (16 mg in the immediate release layer and 32 mg in the sustained release layer); 25 mg phenobarbital in the immediate release layer.

Tedral Elixir: each 5 ml teaspoonful contains 32.5 mg theophylline, 6 mg ephedrine hydrochloride, and 2 mg phenobarbital; the alcohol content is 15%.

Indications. Tedral, Tedral SA, and Tedral Elixir are indicated for the symptomatic relief of bronchial asthma, asthmatic bronchitis, and other bronchospastic disorders. They may also be used prophylactically to abort or minimize asthmatic attacks and are of value in managing occasional, seasonal or perennial asthma.

Tedral SA (Sustained Action) offers the convenience of b.i.d. dosage.

Tedral Elixir is convenient for persons who may have difficulty in swallowing tablets.

These Tedral formulations are adjuncts in the total management of the asthmatic patient. Acute or severe asthmatic attacks may necessitate supplemental therapy with other drugs by inhalation or other parenteral routes.

Contraindications. Sensitivity to any of the ingredients; porphyria.

Warnings. Drowsiness may occur. PHENOBARBITAL MAY BE HABIT-FORMING.

Precautions. Use with caution in the presence of cardiovascular disease, severe hypertension, hyperthyroidism, prostatic hypertrophy, or glaucoma.

Adverse Reactions. Mild epigastric distress, palpitation, tremulousness, insomnia, difficulty of micturition, and CNS stimulation have been reported.

Average Dosage. *Prophylactic or Therapeutic.*

Tedral: *Adults*—One or two tablets every 4 hours. *Children*—(Over 60 lb) one-half the adult dose.

Tedral SA: *Adults*—One tablet on arising and one tablet 12 hours later. Tablets should not be chewed. *Children*—Not established for children under 12.

Tedral Elixir: *Note:* One teaspoonful is equivalent to *one-quarter* Tedral tablet. *Children*—One teaspoonful per 30 lb body weight, every 4-6 hours, unless prescribed otherwise by physician. Should be given to children under 2 years of age only with extreme caution. *Adults*—One to two tablespoonfuls every four hours.

Supplied. Tedral: White, uncoated scored tablets in bottles of 24 (N 0047-0230-24), 100 (N 0047-0230-51) and 1000 (N 0047-0230-60) Also in Unit Dose—package of 10 x 10 strips (N 0047-0230-11).

Tedral SA: Double-layered, uncoated, coral/mottled white tablets in bottles of 100 (N 0047-0231-51) and 1000 (N 0047-0231-60). Also in Unit Dose—package of 10 x 10 strips (N 0047-0231-11).

Tedral Elixir: Dark red and cherry-flavored in 474 ml (16 fl oz) bottles (N 0047-0242-16).

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In Memoriam

CARROLL H. LUHR, JR., M.D.
Louisville
1924-1977

The Journal was recently notified of the death of Carroll H. Luhr, Jr., M.D., Louisville, which was inadvertently omitted from previous issues. Doctor Luhr died on February 26 at the age of 52. He had served as University physician at the University of Louisville Student Health Services since 1953 and was a 1946 graduate of the University. Doctor Luhr was an active member of the Jefferson County Medical Society, as well as the Kentucky and American medical associations.

WILLIAM H. BARNARD, M.D.
Elizabethtown
1905-1977

William Harvey Barnard, M.D., Elizabethtown, 72, died on August 27. A 1931 graduate of Vanderbilt University School of Medicine, Doctor Barnard practiced family medicine in Elizabethtown from 1946 until his retirement in 1975. A past president of the Hardin County Medical Society, Doctor Barnard was an emeritus member of the Kentucky Medical Association.

RICHARD E. DAVIS, M.D.
Central City
1922-1977

Richard Elmer Davis, M.D., a general practitioner, died on August 29 at the age of 55. A 1946 graduate of the University of Louisville School of Medicine, Doctor Davis was a member of the Pennyrile Medical Society, the Kentucky Medical Association, and the American Medical Association.

GROVER B. SANDERS, M.D.
Louisville
1919-1977

Grover B. Sanders, M.D., 57, died on August 31 in Louisville. A 1945 graduate of the University of Louisville School of Medicine, Doctor Sanders practiced internal medicine at Louisville Memorial Hospital. He belonged to the Jefferson County Medical Society, and the Kentucky and American medical associations.

Annual Meeting to be Featured In November Journal

The 1977 Annual Meeting of the Kentucky Medical Association was being held in Louisville when this issue of *The Journal* went to press.

Full details of the convention will be featured in the November issue. Information on the new officers and trustees as well as attendance figures and actions of the House of Delegates will be highlighted next month.

BRIEF SUMMARY OF PRESCRIBING INFORMATION

ANTIMINTH® (pyrantel pamoate)
ORAL SUSPENSION

Actions. Antiminth (pyrantel pamoate) has demonstrated anthelmintic activity against *Enterobius vermicularis* (pinworm) and *Ascaris lumbricoides* (roundworm). The anthelmintic action is probably due to the neuromuscular blocking property of the drug.

Antiminth is partially absorbed after an oral dose. Plasma levels of unchanged drug are low. Peak levels (0.05-0.13 µg/ml) are reached in 1-3 hours. Quantities greater than 50% of administered drug are excreted in feces as the unchanged form, whereas only 7% or less of the dose is found in urine as the unchanged form of the drug and its metabolites.

Indications. For the treatment of ascariasis (roundworm infection) and enterobiasis (pinworm infection).

Warnings. *Usage in Pregnancy:* Reproduction studies have been performed in animals and there was no evidence of propensity for harm to the fetus. The relevance to the human is not known.

There is no experience in pregnant women who have received this drug.

The drug has not been extensively studied in children under two years; therefore, in the treatment of children under the age of two years, the relative benefit/risk should be considered.

Precautions: Minor transient elevations of SGOT have occurred in a small percentage of patients. Therefore, this drug should be used with caution in patients with preexisting liver dysfunction.

Adverse Reactions. The most frequently encountered adverse reactions are related to the gastrointestinal system.

Gastrointestinal and hepatic reactions: anorexia, nausea, vomiting, gastralgia, abdominal cramps, diarrhea and tenesmus, transient elevation of SGOT.

CNS reactions: headache, dizziness, drowsiness, and insomnia. Skin reactions: rashes.

Dosage and Administration. *Children and Adults:* Antiminth Oral Suspension (50 mg of pyrantel base/ml) should be administered in a single dose of 11 mg of pyrantel base per kg of body weight (or 5 mg/lb.); maximum total dose 1 gram. This corresponds to a simplified dosage regimen of 1 ml of Antiminth per 10 lb. of body weight. (One teaspoonful=5 ml.)

Antiminth (pyrantel pamoate) Oral Suspension may be administered without regard to ingestion of food or time of day, and purging is not necessary prior to, during, or after therapy. It may be taken with milk or fruit juices.

How Supplied. Antiminth Oral Suspension is available as a pleasant tasting caramel-flavored suspension which contains the equivalent of 50 mg pyrantel base per ml, supplied in 60 ml bottles and Unitcups™ of 5 ml in packages of 12.

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(pyrantel pamoate)

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ORAL SUSPENSION



a drug of choice in
pinworm infections

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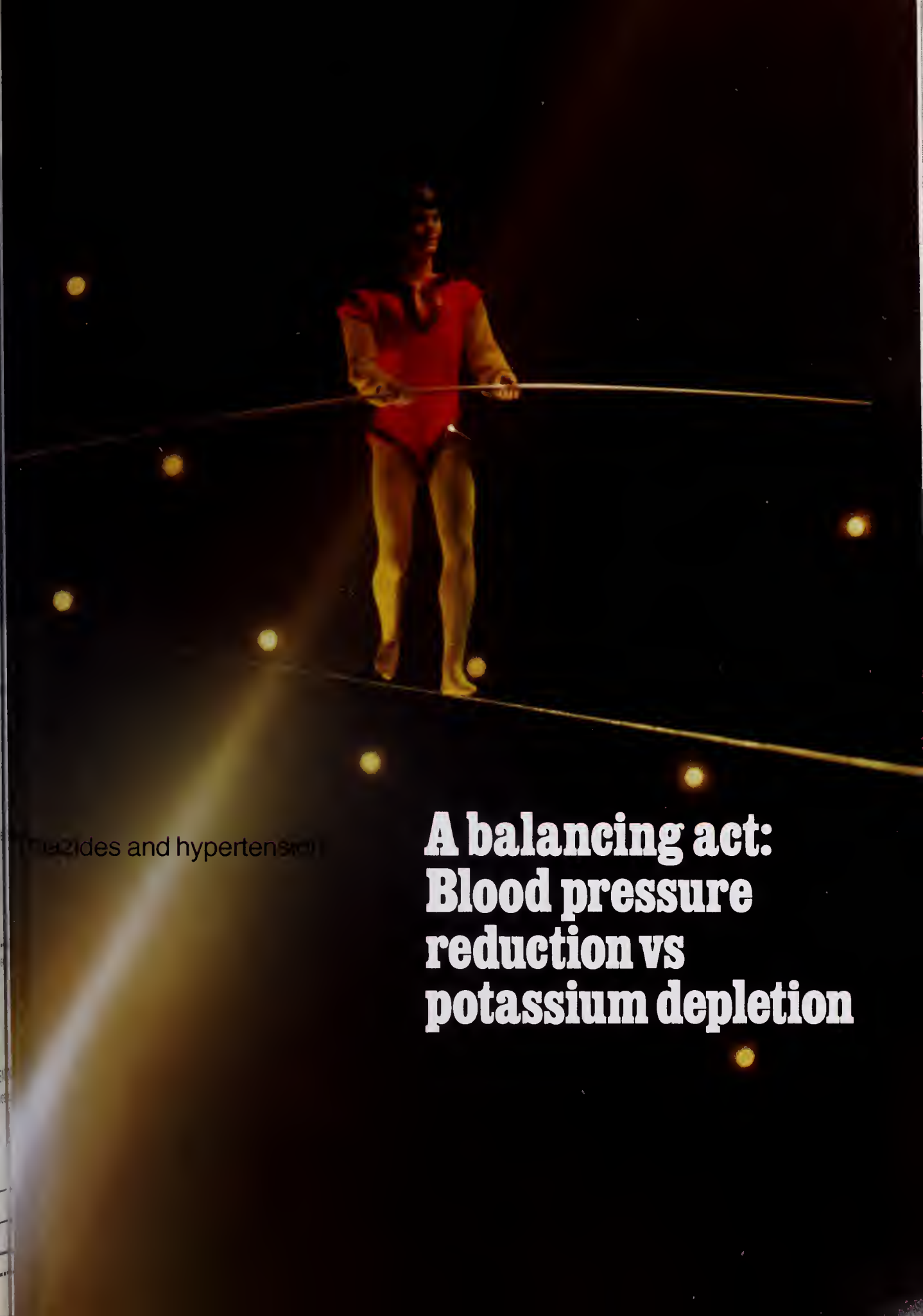
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(thiazides and hypertension)

A balancing act: Blood pressure reduction vs potassium depletion

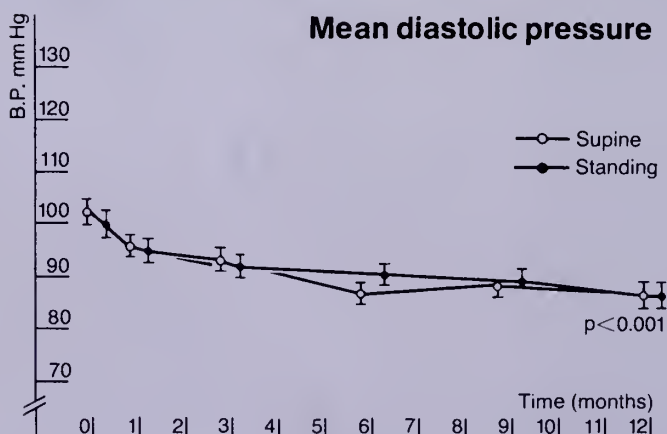
From a 1-year study of 18 patients
with mild uncomplicated
hypertension published in The Lancet*

Once a day

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Bendro-
flumethiazide
Tablets N.F.

Diastolic blood pressure down 12-15%



"The mean pretreatment blood pressure was 170/103mmHg (supine) and 166/100mmHg (standing). Diastolic pressure continued to fall over the first 6 months and then there was no further change up to 1 year...The mean blood pressure at 12 months was 153/88mmHg (supine) and 142/88mmHg (standing)."

"The patients were receiving a single daily dose of 10 mg bendrofluazide [bendroflumethiazide]...there were no apparent side effects from the medication."

*Wilkinson PR et al: The Lancet 1:759-762, 1975.



Once a day

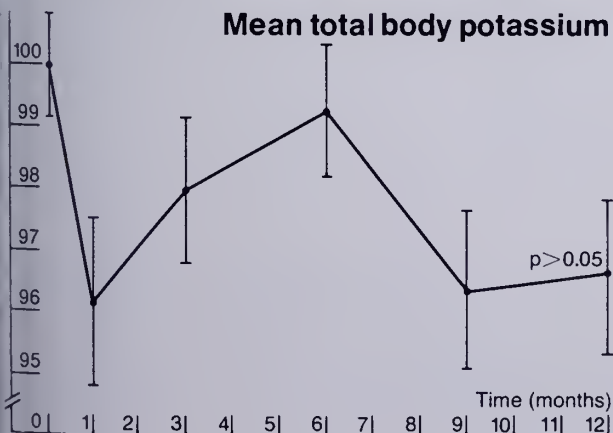
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2.5, 5 and 10 mg

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Mean total body potassium



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"A serum potassium of less than 3.5mmol per litre is often taken as the value below which potassium supplements should be given...At an arbitrary lower value for serum potassium of 3.0mmol per litre, few patients, our data suggest, would need potassium supplements. Our findings with TBK support this view..."

See next page for full prescribing information.

Once a day **Naturetin®** **Bendroflumethiazide** **Tablets N.F.**

NATURETIN®-2.5

NATURETIN®-5

NATURETIN®-10

Bendroflumethiazide Tablets N.F.

DESCRIPTION

Naturetin (Bendroflumethiazide Tablets N.F.) is a benzothiadiazine derivative containing a benzyl and a trifluoromethyl group. It is a potent oral diuretic and antihypertensive agent available as compressed tablets providing 2.5, 5.0, or 10 mg. bendroflumethiazide.

ACTIONS

The mechanism of action results in an interference with the renal tubular mechanism of electrolyte reabsorption. At maximal therapeutic dosage all thiazides are approximately equal in their diuretic potency. The mechanism whereby thiazides function in the control of hypertension is unknown.

INDICATIONS

Naturetin (Bendroflumethiazide Tablets N.F.) is indicated as adjunctive therapy in edema associated with congestive heart failure, hepatic cirrhosis and corticosteroid and estrogen therapy.

Bendroflumethiazide has also been found useful in edema due to various forms of renal dysfunction such as: nephrotic syndrome, acute glomerulonephritis, and chronic renal failure.

Naturetin (Bendroflumethiazide Tablets N.F.) is indicated in the management of hypertension either as the sole therapeutic agent or to enhance the effectiveness of other antihypertensive drugs in the more severe forms of hypertension.

Usage in Pregnancy. The routine use of diuretics in an otherwise healthy woman is inappropriate and exposes mother and fetus to unnecessary hazard. Diuretics do not prevent development of toxemia of pregnancy, and there is no satisfactory evidence that they are useful in the treatment of developed toxemia.

Edema during pregnancy may arise from pathological causes or from the physiologic and mechanical consequences of pregnancy. Thiazides are indicated in pregnancy when edema is due to pathologic causes, just as they are in the absence of pregnancy (see WARNINGS). Dependent edema in pregnancy, resulting from restriction of venous return by the expanded uterus, is properly treated through elevation of the lower extremities and use of support hose; use of diuretics to lower intravascular volume in this case is illogical and unnecessary. There is hypervolemia during normal pregnancy which is harmful to neither the fetus nor the mother (in the absence of cardiovascular disease), but which is associated with edema, including generalized edema, in the majority of pregnant women. If this edema produces discomfort, increased recumbency will often provide relief. In rare instances, this edema may cause extreme discomfort which is not relieved by rest. In these cases, a short course of diuretics may provide relief and may be appropriate.

CONTRAINDICATIONS

Bendroflumethiazide is contraindicated in anuria.

It is also contraindicated in patients who have previously demonstrated hypersensitivity to it or other sulfonamide-derived drugs.

WARNINGS

Bendroflumethiazide should be used with caution in severe renal disease. In patients with renal disease, thiazides may precipitate azotemia. Cumulative effects of the drug may develop in patients with impaired renal function.

Thiazides should be used with caution in patients with impaired hepatic function or progressive liver disease, since minor alterations of fluid and electrolyte balance may precipitate hepatic coma.

Thiazides may be additive or may potentiate the action of other antihypertensive drugs. Potentiation occurs with ganglionic or peripheral adrenergic blocking drugs.

Sensitivity reactions may occur in patients with a history of allergy or bronchial asthma.

The possibility of exacerbation or activation of systemic lupus erythematosus has been reported.

Usage in Pregnancy. Thiazides cross the placental barrier and appear in cord blood. The use of thiazides in pregnant women requires that the anticipated benefit be weighed against possible hazards to the fetus. These hazards include fetal or neonatal jaundice, thrombocytopenia, and possibly other adverse reactions which have occurred in the adult.

Nursing Mothers. Thiazides appear in breast milk. If use of the drug is deemed essential, the patient should stop nursing.

PRECAUTIONS

Periodic determination of serum electrolytes to detect possible electrolyte imbalance should be performed at appropriate intervals.

All patients receiving thiazide therapy should be observed for clinical signs of fluid or electrolyte imbalance; namely, hyponatremia, hypochloremic alkalosis, and hypokalemia. Serum and urine electrolyte determinations are particularly important when the patient is vomiting excessively or receiving parenteral fluids. Medication such as digitalis may also influence serum electrolytes. Warning signs, irrespective of cause, are: dryness of the mouth, thirst, weakness, lethargy, drowsiness, restlessness, muscle pains or cramps, muscular fatigue, hypotension, oliguria, tachycardia, and gastrointestinal disturbances such as nausea and vomiting.

Hypokalemia may develop with thiazides as with any other potent diuretic, especially with brisk diuresis, when severe cirrhosis is present, or during concomitant use of corticosteroids or ACTH.

Interference with adequate oral electrolyte intake will also contribute to hypokalemia. Digitalis therapy may exaggerate metabolic effects of hypokalemia especially with reference to myocardial activity.

Any chloride deficit is generally mild and usually does not require specific treatment except under extraordinary circumstances (as in liver disease or renal disease). Dilutional hyponatremia may occur in edematous patients in hot weather; appropriate therapy is water restriction, rather than administration of salt except in rare instances when the hyponatremia is life threatening. In actual salt depletion, appropriate replacement is the therapy of choice.

Hyperuricemia may occur or frank gout may be precipitated in certain patients receiving thiazide therapy.

Insulin requirements in diabetic patients may be increased, decreased, or unchanged. Latent diabetes mellitus may become manifest during thiazide administration.

Thiazide drugs may increase the responsiveness to tubocurarine.

The antihypertensive effects of the drug may be enhanced in the postsympathectomy patient.

Thiazides may decrease arterial responsiveness to norepinephrine. This diminution is not sufficient to preclude effectiveness of the pressor agent for therapeutic use. If emergency surgery is indicated, preanesthetic and anesthetic agents should be administered in reduced dosage.

If progressive renal impairment becomes evident, as indicated by a rising nonprotein nitrogen or blood urea nitrogen, a careful reappraisal of therapy is necessary with consideration given to withholding or discontinuing diuretic therapy.

Thiazides may decrease serum PBI levels without signs of thyroid disturbance.

ADVERSE REACTIONS

Gastrointestinal System: anorexia, gastric irritation, nausea, vomiting, cramping, diarrhea, constipation, jaundice (intrahepatic cholestatic jaundice), and pancreatitis.
Central Nervous System: dizziness, vertigo, paresthesia, headache, and xanthopsia.
Hematologic: leukopenia, agranulocytosis, thrombocytopenia, and aplastic anemia.
Dermatologic-Hypersensitivity: purpura, photosensitivity, rash, urticaria, and necrotizing angitis (vasculitis, cutaneous vasculitis).
Cardiovascular: orthostatic hypotension may occur and may be aggravated by alcohol, barbiturates or narcotics. **Other:** hyperglycemia, glycosuria, occasional metabolic acidosis in diabetic patients, hyperuricemia, allergic glomerulonephritis, muscle spasm, weakness, and restlessness.

Whenever adverse reactions are moderate or severe, thiazide dosage should be reduced or therapy withdrawn.

DOSAGE AND ADMINISTRATION

Therapy should be individualized according to patient response. This therapy should be titrated to gain maximal therapeutic response as well as the minimal dose possible to maintain that therapeutic response.

Diuretic: The usual dose is 5 mg. once daily, preferably given in the morning. To initiate therapy, doses up to 20 mg. may be given once daily or divided into two doses. A single daily dose of 2.5 to 5 mg. should suffice for maintenance.

Alternatively, intermittent therapy may be advantageous in many patients. By administering the preparation every other day or on a three to five day per week schedule, electrolyte imbalance is less likely to occur; however, the possibility still exists.

In general, the lowest dosage that achieves the therapeutic response should be employed.

Antihypertensive: The suggested initial dosage is 5 to 20 mg. daily. Maintenance dosage may range from 2.5 to 15 mg. per day, depending on the individual response of the patient. When the diuretic is used with other antihypertensive agents, lower maintenance doses for each drug are usually sufficient.

STORAGE

Store at room temperature; avoid excessive heat.

HOW SUPPLIED

2.5 mg. tablets in bottles of 100, 5 mg. tablets (scored) in bottles of 100 and 1000, and 10 mg. tablets (scored) in bottles of 100.

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POSTGRADUATE OPPORTUNITIES



IN KENTUCKY

OCTOBER

- 14-15 Regional Meeting, American College of Physicians, Stouffer's Inn, Louisville
- 17-21 Second Family Medicine Review**, University of Louisville School of Medicine, Marriott Inn, Clarksville
- 19-20 Third Annual Symposium—Current Trends in Allergy and Immunology**, Marriott Inn, Clarksville
- 24 25th Annual David W. Yandell Lecture, "Immunologic Aspects of Osteosarcoma," Health Sciences Center Auditorium, University of Louisville, Louisville

NOVEMBER

- 3 "Recent Advances in Psychopharmacology"*, by Robert P. Granacher, Jr., M.D. (University of Kentucky), Lake Cumberland Medical Center, Somerset
- 4-5 Conference on Cancer of the Bladder and Prostate, Kentucky Division, American Cancer Society, Stouffer's Inn, Louisville. Space limited, no fee. Contact: George A. Sehlinger, M.D., 2313 Medical Arts Bldg., Louisville, Ky. 40217
- 10 13th Annual Louisville Pediatric Society Lecture-ship, Health Sciences Center Auditorium, Louisville
- 11-12 11th Annual Newborn Symposium, University of Louisville School of Medicine, Louisville
- 16 "Update on Hypertension"*, by Gordon Guthrie, M.D. and Russell McAllister, M.D. (University of Kentucky), Jenny Wiley State Resort Park, Prestonsburg

DECEMBER

- 1 "New Dimensions in Treating Hypertension"*, by Donald Vidt, M.D. (Cleveland Clinic), Lake Cumberland Medical Center, Somerset

- 8 "Update on Hypertension"*, Gordon Guthrie, M.D. and Russell McAllister, M.D. (University of Kentucky), Pineville Community Hospital, Pineville

IN SURROUNDING STATES

OCTOBER

- 20-22 Pediatric Orthopedic Conference, Sheraton Hotel, Gatlinburg. Contact: Harvey L. Goodman, M.D., University of Tennessee Center for Health Sciences, 1924 Alcoa Hgwy., Knoxville, Tenn. 37920.

NOVEMBER

- 5-10 Annual Meeting, American Academy of Pediatrics, New York Hilton, New York City
- 10-12 "Diagnostic Radiology for Emergency and Family Physicians," University of Tennessee College of Medicine, Chattanooga. Contact: Leroy Pickles, CME Director, Suite 400, 921 E. 3rd St., Chattanooga, Tenn. 37403.
- 14-16 "The Trauma Patient: Care and Complications," Sponsored by American College of Surgeons and Case Western Reserve Medical School, Marriott Inn, Cleveland

DECEMBER

- 9-10 Symposium in Human Infertility, Atlanta Marriott Hotel, Atlanta. For further information: Xytex Corporation, 1519A Laney Walker Blvd., Augusta, Ga. 30904.

UPCOMING FEATURES

Annual Meeting Details—
November Journal

Digest of House of Delegates—
December Journal

*For further information, contact: Frank R. Lemon, M.D., Associate Dean for Continuing Education, University of Kentucky College of Medicine, Lexington 40506

**For further information contact: Gerald D. Swim, Executive Director, Office of Continuing Education, University of Louisville School of Medicine, Louisville 40202

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The JOURNAL *of the* Kentucky Medical Association

ISSUED MONTHLY UNDER THE DIRECTION OF THE BOARD OF TRUSTEES

Volume 75

OCTOBER 1977

No. 10

Temporal Arteritis with Normal Sedimentation Rates

C. RICHARD GILL, M.D.*

Lexington, Kentucky

A case of temporal arteritis with normal sedimentation rates is presented. This is distinctly unusual since most cases of temporal arteritis are associated with markedly elevated sedimentation rates.

TEMPORAL arteritis (TA) was first described in 1890 by Hutchinson, a famous English physician.¹ Hutchinson's description of the local symptoms of temporal arteritis is probably one of the best on record: "*The subject in this case was an old man and he had, I believe, suffered from gout. I was asked to see him because I was told he had 'red streaks on his head' which were painful and prevented his wearing his hat. The 'red streaks' proved on examination to be his temporal arteries, which on both sides were found to be inflamed and swollen.*"

This clinical picture of TA is (1) associated with a high sedimentation rate and (2) confirmed by a positive biopsy of the temporal artery, showing evidence of inflammation and frequently the presence of giant cells. The sedimentation rate is usually over 100 (Westergren). The following is a case report of a patient who had the classic signs and symptoms of temporal arteritis, a positive biopsy diagnosis of giant cell arteritis involving the temporal artery, and **normal** sedimentation rates.

Case Report

A 70-year-old white female with a long history of migraine headaches and neck pains secondary to degenerative joint and disc disease of the cervical spine was seen at the Lexington Clinic on September 7, 1976, because of headache, more severe than previously noted, nausea and vomiting of three weeks duration. Examination revealed slight tenderness over the left temporal artery. The sedimentation rate was 15 mm/hr (Westergren) and the following laboratory studies were negative or normal: complete blood count, C-reactive protein, protein electrophoresis, SMA 12, CPK, rheumatoid arthritis test, anti-nuclear antibody test, and fibrinogen level. An electroencephalogram, LP, and CT scan were all normal. Repeat sedimentation rates were 13 and 9 mm/hr (Westergren). A biopsy of the left temporal artery revealed a classical pathohistologic picture of giant cell arteritis.² (Fig. 1, 2, and 3) The patient was started on Prednisone 60 mg daily in divided doses. Within 24 hours her headache was much improved.

Discussion

Headache is the most common symptom in temporal arteritis (TA) and may begin with a "flu-like syndrome" associated with muscle ache, malaise, weakness, anorexia, and fever. The term systemic giant cell arteritis is frequently used to describe the entire picture.³ Forty per cent of the cases may begin acutely; 60% may begin insidiously. Usually patients are 55 years or older, although there have been sporadic cases of

*From the Lexington Clinic, Lexington
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TA reported in patients as young as 31.⁴ In addition to the temporal arteries and other cranial arteries, there may be involvement of the carotid, subclavian, axillary, brachial, renal, mesenteric, and iliac arteries with the signs and symptoms dependent upon the location of the artery. In temporal artery involvement the symptoms are those of headache, scalp tenderness, and jaw claudication. If the ophthalmic branch of the carotid artery is involved, there may be a variety of visual symptoms, even total blindness. Blindness may occur as a result of ischemic optic neuritis, ischemic retrobulbar neuritis, or occlusion of the central retinal artery.⁴ With involvement of the subclavian, axillary, brachial, femoral or popliteal arteries, claudication of the extremity may occur. Mesenteric artery involvement may result in abdominal pain and mesenteric infarction. Coronary, renal and pulmonary vessel involvement is rare.

Physical examination in giant cell arteritis may show prominent pulsating, tender, swollen temporal arteries associated with scalp tenderness. Occasionally pain may occur in the occipital area, indicating involvement of that artery. Bruits may be heard over the orbits and over the involved arteries.² Since generalized involvement may occur, patients with TA should have their blood pressure taken in both arms and in both legs, and one should auscultate over the various arteries.

There is usually an elevation of the sedimentation rate and leukocytes.⁵ The sedimentation rate may exceed 100 mm/hr (Westergren); a normal or slightly increased sedimentation rate will make the diagnosis of temporal arteritis doubtful. The usual range is 45-155 mm/hr with

the mean being 101.⁴ The sedimentation rate is increased due to an active process of inflammation involving the arteries and elevation of the serum fibrinogen. The sedimentation rate may reflect the extent of the disease as well as the intensity of inflammation.⁴ The more arteries involved and the more extensive the involvement, the greater the sedimentation rate. There may be an elevation of the α -2 globulin on the protein electrophoretic pattern.² Liver function abnormalities have been noted and there is usually a mild anemia of the microcytic normochromic type.⁶ The serum iron and total iron binding capacity are reduced. Serologic tests for rheumatoid factor and antinuclear antibodies are usually negative.

The diagnosis is confirmed by artery biopsy, usually the temporal artery, which may be excised without any deleterious effect on the patient. Most patients are elderly and many tolerate the high and continuous doses of steroids poorly. A positive biopsy is reassuring to both the physician and the patient. The differential diagnosis includes other types of arteritis or vasculitis as seen in periarteritis nodosa and rheumatoid arthritis.

The treatment can be started in suspected cases while awaiting biopsy results. Obtaining an adequate specimen (3-6 cm.) and an adequate number of slides is important since in some biopsy specimens cuts 3 mm apart may be different, in that one may show "classic" giant cell arteritis (GCA), and another specimen only 3 mm away may be normal.⁴ Angiography of the temporal artery has been used to detect lesions and sites for biopsy.

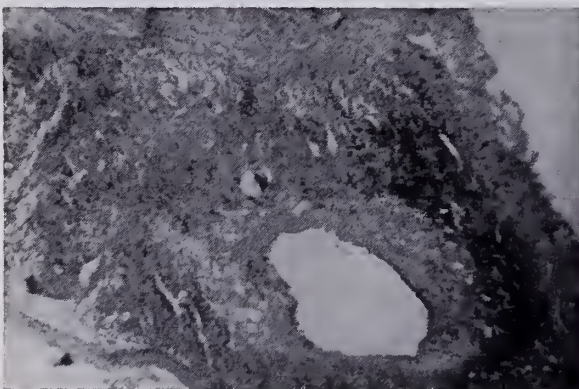


FIG. 1. Low power of the temporal artery showing the pan-arteritis with narrowing of the lumen, diffuse fibrotic thickening of the intima, and disruption of the internal elastic lamina.

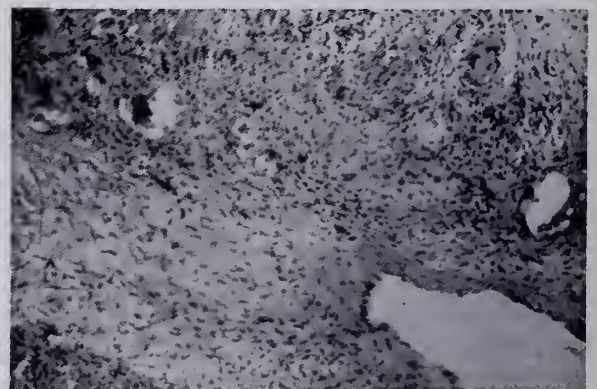


FIG. 2. High power of the temporal artery showing maximal inflammatory changes in the media with diffuse cellular infiltration, mostly mononuclears, and focal necrosis. Giant cells are also seen.

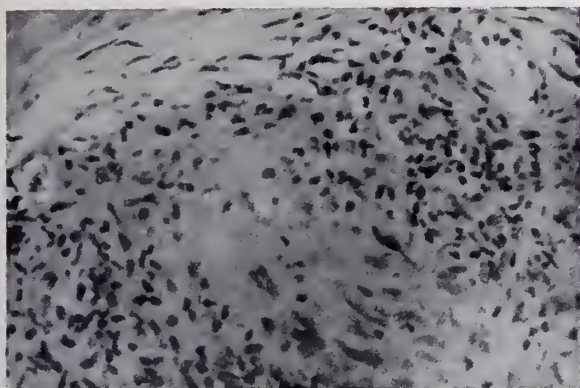


FIG. 3. High power of the temporal arteries showing granulomas and giant cells with diffuse cellular infiltration.

The treatment of GCA is the use of corticosteroids. One regimen that has been proposed is the use of Prednisone, 45-60 mg daily in divided doses for four to six weeks. The dosage is decreased by 5 mg per week to a daily dose of 30 mg; then the dosage is reduced by 2.5 mg per week until the daily dose is 10-15 mg; then the dose is reduced by 1 mg every one to two weeks.² The reductions are made considering the patient's symptoms, the sedimentation rate, and other laboratory data. Maintenance doses may be necessary for years. Anticoagulant treatment with heparin has been used with questionable results in some cases of temporal arteritis with "early visual symptoms" such as scotomata, field defects, and partial blindness. Patients are skin tested with PPD; if positive, INH and vitamin B₆ should be given.* Giant cell arteritis may run a course of several months or years. Exacerbations may occur; generally the treatment lasts for at least two years.⁷ Alternate day steroid doses are not always acceptable, because the arteritis may worsen when there is not continuous daily therapy.

In 1963, it was reported that some patients with polymyalgia rheumatica (PMR) without the classic clinical findings of TA had positive temporal artery biopsies.⁸ Thus, TA or GCA was linked with PMR. As mentioned above, GCA may be associated with myalgias, malaise, weakness, anorexia, and fever—symptoms frequently seen in patients with PMR. The two entities have much in common clinically. Laboratory findings

may be quite similar. Hence, it is not surprising that a significant relationship has been found between the two diseases. A series was reported in 1972 consisting of ninety-four patients with TA and PMR; in forty-nine patients with symptoms of myalgias alone, twenty had a positive artery biopsy without signs and symptoms indicative of localized TA.⁴ Patients with TA may develop signs and symptoms of PMR. They may occur separately but may be associated with each other in a patient. Approximately 50% of patients with GCA will have PMR; approximately 30% or less of patients with PMR will have GCA.²

Summary

A case of temporal arteritis with a normal sedimentation rate is presented. The early recognition of temporal arteritis is important, not only to relieve symptoms, but also to prevent blindness. Steroid treatment is effective, but may be hazardous due to side effects which develop because of the large dosage and duration of treatment required. Temporal arteritis may be associated with a rheumatic condition called polymyalgia rheumatica. Some patients with polymyalgia rheumatica have asymptomatic involvement of their temporal arteries.

Acknowledgement

Appreciation is given to Charles R. Moore, M.D., Lexington Clinic, for his review and comments regarding this article; also to John C. Malek, M.D., neurologist, and M. Wilson Eastland, M.D., surgeon, who assisted in the workup of this patient.

References

1. Hutchinson, J., *Arch Surg* (London) 1:323, 1890.
2. Hunder, G.G., Allen, G.L.: The Relationship Between Polymyalgia Rheumatica and Temporal Arteritis. *Geriatrics*. 28:134-142, 1973.
3. Hollander, J. L. Arthritis and Allied Conditions: *A Textbook of Rheumatology*. P. 929, 1972.
4. Hamrin, B.: Polymyalgia Arteritica. *Acta Med Scan* (Suppl). 533:1-131, 1972.
5. Hunder, G. G., Disney, T. F., Ward, L. E.: Polymyalgia Rheumatica. *Mayo Clin Proc.* 44:849-875, 1969.
6. Healey, L. A., Wilske, K. R.: Anemia as a Presenting Manifestation of Giant Cell Arteritis, *Arthritis Rheum.* 14:27-31, 1971.
7. Fauchald, P., Rygvold, O., Oystese, B.: Temporal Arteritis and Polymyalgia Rheumatica: Clinical and Biopsy Findings. *Ann Intern Med.* 77:845-852, 1972.
8. Alestig, K., Barr, J.: Giant Cell Arteritis: A Biopsy Study of Polymyalgia Rheumatica, Including One Case of Takayasu's Disease. *The Lancet*. p. 1228-30, June 8, 1963.

*Editors' Note: There is controversy about the use of INH with steroids in elderly patients with a positive PPD.

Febrile Transfusion Reactions Despite Compatible Cross Matches

ANNE D. HOOPER, M.D.*

West Liberty, Kentucky

A patient had severe, febrile transfusion reactions to four out of five units of "compatible" blood. Leukoagglutinins were identified. Leukocyte poor blood was then given with good results.

PRESENT methods used for matching blood for transfusion are generally adequate to insure compatible blood. However, the red cell membranes are not the only antigenic material in transfused blood, and the reactions to the other antigens can occasionally be severe, cannot be ignored, and can recur often enough that finding suitable blood for transfusion can be a difficult problem. Recently such a case occurred and is presented here.

Case Report

A 69-year-old white woman who had seven or eight living children was found to have a hematocrit of 25% in the summer of 1975. She was treated with iron but the anemia persisted. In March 1976 a bone marrow examination was done and 24% of the cells were plasma cells. The total protein was 10 g/100ml with a monoclonal IgG peak. No Bence-Jones protein was present, but x-rays of the bones showed areas of radiolucency consistent with a diagnosis of multiple myeloma.

In July 1976 because of persistent anemia with hemoglobin ranging from 4-7 g/100ml, transfusions were ordered. During the crossmatch there was some rouleaux formation, but no serious problems with agglutination except for a weak cold agglutinin. There was no reaction to the first blood transfusion unit. During the administration of the second unit, the temperature rose to 102 F., abdominal pain and backache occurred, she was flushed and restless. The direct Coombs on the patient's post-transfusion blood

sample was negative; there was no evidence of hemolysis or incompatibility.

On September 22, 1976, an attempt was made to give two more units. Thinking a cold agglutinin could be the cause of the previous reaction, each unit was warmed to 37 C. prior to administration. Nevertheless, a febrile reaction occurred about an hour and a half after starting the first unit. It was discontinued. The next day another unit was started with similar results. Again the standard transfusion workup showed no evidence of incompatibility or hemolysis.

On November 2, 1976, another unit was started, and again a febrile reaction occurred about an hour and a half later. Again the transfusion reaction workup failed to reveal the cause.

With febrile reactions to four out of five units of "compatible" blood, the possibility of a reaction to blood elements other than erythrocytes was considered. Therefore on December 9, 1976, a test for leukoagglutinins was performed. Testing methods are outlined in texts of laboratory techniques. The patient's serum clumped the white cells of two random donors of the same ABO and Rh type and leukocyte poor blood was ordered for future transfusions. On December 13, 1976, she received two units of leukocyte poor blood (available from most large blood banks on special request) with no reaction. On December 15, 1976, she received two additional units of leukocyte poor blood with no reaction. The hemoglobin rose from 4.4 g/100 ml to 10.2 g/100ml. She went home improved.

She returned on February 8, 1977, to receive two additional units of leukocyte poor blood. The first unit gave no reaction. With the second unit she again had a febrile reaction. No blood has been given since then.

Discussion

With proper matching for the red cell membrane antigens, the incidence of hemolytic transfusion reactions or reactions associated with red cell antibodies has become very low. At the Royal Infirmary of Edinburgh in 1974 there was only

*Pathologist, Morgan County Appalachian Regional Hospital, West Liberty
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one transfusion reaction associated with red cell antibodies out of 36,424 units transfused. However, there were a total of 114 transfusion reactions. In 27 cases leukocyte or plasma protein antibodies were found. In 86 cases no cause was found.¹

Erythrocytes, leukocytes, platelets, and serum proteins are all antigenic and capable of inciting the production of antibodies in a recipient. There are many systems of antigens which are primarily on the red cells, such as the Rh and Kell systems. The ABO system is primarily on the red cells, but it is prominent enough on other cells that it should be matched in any type of tissue matching.

The most important antigenic system of the white cells, platelets, and for transplants is the HL-A system. This system is apparently common to most tissue cells, and is the system primarily involved with leucoagglutinins. It is a very complex system with two main loci on a certain chromosome, LA and FOUR, each of which produces an antigen. These antigens are generally transmitted in pairs known as haplotypes. At least 14 possible antigens are derived from the LA locus and at least 27 are derived from FOUR.² This polymorphism presents tremendous problems in tissue typing, and means that the overwhelming probability in any transfusion or pregnancy is that there will not be a perfect match.

In addition, lymphocytes, neutrophils, and platelets have antigens which are unique to each type of cell and do not belong to the HL-A system; at times antibodies are produced to these antigens. The most common antigens among the serum proteins are the immunoglobulins.¹

Leukoagglutinins are rarely, if ever, produced in a patient who has never been transfused or pregnant. Payne found no leucoagglutinins in four patients with multiple myeloma nor in 26 patients with lymphoma.³

Transfusions and/or pregnancies can sensitize a patient to any of the above antigens. A single transfusion will often suffice for the more potent red cell antigens such as Rh₀(D) or Kell, but only a small proportion of equally incompatible pregnancies will sensitize the mother. With the leucoagglutinins the opposite is true. It takes an average of eight transfusions to produce detectable leucoagglutinins,⁴ but 13-25% of women have leucoagglutinins and/or lymphocytotoxic antibodies after a single pregnancy, and by the

end of three pregnancies over 50% of women have developed leucoagglutinins and/or lymphocytotoxic antibodies.^{5,6} It may be that pregnancy is better for the development of leucoagglutinins since the white cells are capable of amoeboid movement and passing through capillary walls, and thus would be more able to reach the maternal circulation often enough and in adequate quantities to sensitize the mother. The fetus first produces granulocytes at 15 weeks and lymphocytes at 18-19 weeks. Overweg and Engelfriet have found lymphocytotoxic antibodies in a non-transfused primigravida as early as the 24th week of pregnancy.⁷ White cells and their products are quickly removed from the blood after transfusion, and would be less likely to sensitize than the red cells which persist for months. In pregnancy red cells reach the maternal circulation only if there is a break in capillary walls, thus decreasing the probability of sensitization over that of white cells.

Once a patient has developed enough leucoagglutinins to give rise to transfusion reactions (febrile reactions), the usual whole blood or packed red cells are unsuitable products for transfusion. Whole blood obviously contains all the white cells and platelets. Packed red cells will also contain most of the white cells and platelets, as it is mostly plasma that is removed. Most larger blood banks can prepare leukocyte poor blood. In addition to the plasma, the buffy coat and the uppermost portion of the red cells are removed. The latter seems to be inseparably mixed with white cells unless sedimenting agents are added. Even in the leukocyte poor blood 20% of the white cells remain.⁸ At present the best method for removing white cells, platelets, and their products is to use erythrocytes which have been frozen, thawed, and washed. This removes most of the white cells and their products; however, even this treatment leaves a number of lymphocytes which are capable of responding in the presence of phytohemagglutinin with mitosis.⁹

The patient had received no transfusions prior to 1976, but she had had at least seven pregnancies, so it is not surprising that she had leucoagglutinins of high enough titer to give severe febrile reactions to four out of five units. After leukocyte poor blood was ordered she did much better, only the last of six units causing a reaction. The reaction could have been due to: 1) the unit was not really leukocyte poor, either

due to a technical error in the blood bank or the donor may have had an unusually high leukocyte count; 2) the unit had an antigen to which she had a higher titer than other antigens, making the remaining 20% of white cell material enough to cause a reaction; or 3) the previous units had caused an anamnestic reaction which had increased the leukoagglutinin titer enough to react with leukocyte poor blood. It was recommended to the patient's physician that frozen red cells which had been thawed and washed be given in the future.

It would be nice to delineate the problem more exactly; that is, find the offending antigen(s), and procure blood free of those antigens. Since the HL-A system, being much more complex than the erythrocyte systems, typing sera is expensive and hard to obtain. Few centers are prepared to investigate these problems in depth and the tests are expensive. It is necessary to settle for the detection of leukoagglutinins and give blood as free as possible of leukocyte antigens. Detecting leukoagglutinins is relatively simple, and the materials used are available in many small hospital laboratories.

Lymphocytotoxins are also produced by isoimmunization, and can cause reactions. Some authorities find that the leukoagglutinin test is more sensitive in predicting febrile reactions than the lymphocytotoxin test.¹⁰

Summary

A patient with multiple myeloma and severe anemia had multiple severe febrile transfusion reactions. The abnormal myeloma protein did

not cause problems in matching blood. The patient had never been transfused, but had at least seven children. Pregnancy is a potent instigator of leukoagglutinin production. Leukoagglutinins were identified by means of a simple test with reagents and equipment available in many small hospital laboratories except for 6% dextran in normal saline which is available as an IV fluid. Once the problem is identified, to prevent febrile transfusion reactions leukocyte poor blood or washed red cells, which can be obtained by special requests from large blood banks, should be used.

References

1. Kay, A.B., Some Complications Associated with the Administration of Blood and Blood Products, *Clinics in Haematology*, 5:165-181, February 1976.
2. Kissmeyer-Nielsen, F., Lamm, L., Svegaard, A. and Thorsby, E., White Cell and Platelet Antigens, *Progress in Transfusion and Transplantation*, pp 91-100, 1972.
3. Payne, R., Leukocyte Agglutinins in Human Sera; Correlation Between Blood Transfusions and Their Development, *Arch. Int. Med.* 99(4):587-606, April 1957.
4. Payne, R., The Association of Febrile Transfusion Reactions with Leukoagglutinins, *Vox Sanguinis* 2:233-241, September 1957.
5. Payne, R. and Rolfs, M.R., Fetomaternal Leukocyte Incompatibility, *J. Clin. Inves.* 37:1756-1763, December 1958.
6. Goodman, H.S. and Masaitis, L., Analysis of the Isoimmune Response to Leukocytes: 1. Maternal Cytotoxic Response to Fetal Lymphocytes, *Pro. Soc. Exp. Biol. Med.* 126:599-604, November 1967.
7. Overweg, J. and Engelfriet, C., Cytotoxic Leukocyte Isoantibodies Formed During the First Pregnancy, *Vox Sanguinis*, 16:97-104, February 1969.
8. Chaplin, H. Jr., Brittingham, T.E. and Cassell, M., Methods for Preparation of Suspensions of Buffy Coat-Poor Red Blood Cells for Transfusion, Including a Report of 50 Transfusions of Suspensions of Buffy Coat-Poor Red Blood Cells Prepared by a Dextran Sedimentation Method, *Am. J. Clin. Path.*, 31:373-383, May 1959.
9. Crowley, J.P., Skrabut, E.M. and Valeri C.R., Immunocompetent Lymphocytes in Previously Frozen Washed Red Cells, *Vox Sanguinis* 26:513-517, June 1974.
10. McCullough, J., Burke, M.E., Wood, N., Carter, S.J., Weiblen, B.J. and Yunis, E.J., Microcapillary Agglutination for the Detection of Leukocyte Antibodies: Evaluation of the Method and Clinical Significance in Transfusion Reactions, *Transfusion* 14:425-432, Sept.-Oct. 1974.

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A Model for Teaching the Anatomy and Function of the Cruciate Ligaments of the Knee

DAVID PECK*

Lexington, Kentucky

A mnemonic device for anatomy and function of the cruciate ligaments of the knee is presented. The mnemonic utilizes the crossed middle and index fingers to represent the anterior and posterior cruciate ligaments respectively.

THE anatomy and function of the cruciate ligaments of the knee have traditionally presented difficulties in learning and remembering the necessary information. A mnemonic device, utilizing one's own hand, has proved to be helpful in this regard and is presented here.

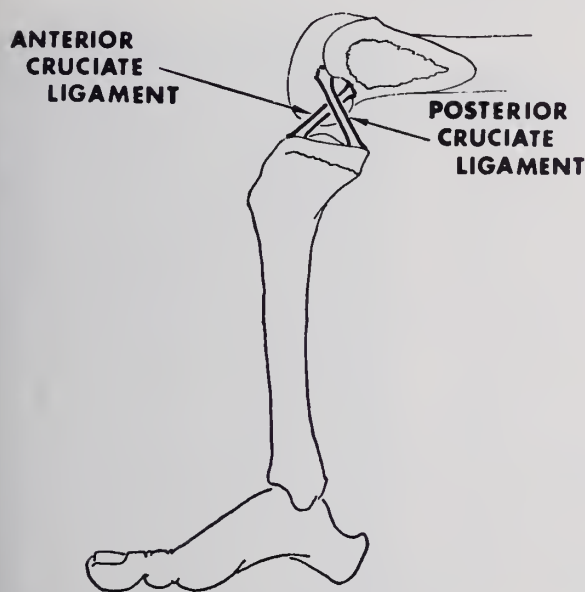


FIG. 1 Right knee in flexion, viewed from the medial side. The medial epicondyle has been removed.

A more or less traditional diagram of the cruciate ligaments is shown in Figure 1. The right knee is in flexion and is viewed from the medial side. In order to facilitate visualization of the cruciate ligaments the medial femoral condyle

has been removed. Figure 2 shows how one's right hand may be used to represent the cruciate ligaments of the right knee. It is helpful here to be comfortably seated with your right leg crossed on top of the left with the right knee in flexion. Now, crossing the fingers of your right hand so that the middle finger is anterior to the index finger, you can easily position the tips of the crossed fingers upon your right knee. The clenched ring and little fingers together represent the lateral femoral condyle, the wrist and forearm represent the femur, and the crossed fingers resting on top of your own knee represent the cruciate ligaments.

The middle finger pointing forward can be visualized as the anterior cruciate ligament. Notice in Figure 2 how a force tending to displace the tibial plateau anteriorly would be resisted by the middle finger—representing the anterior cruciate ligament.

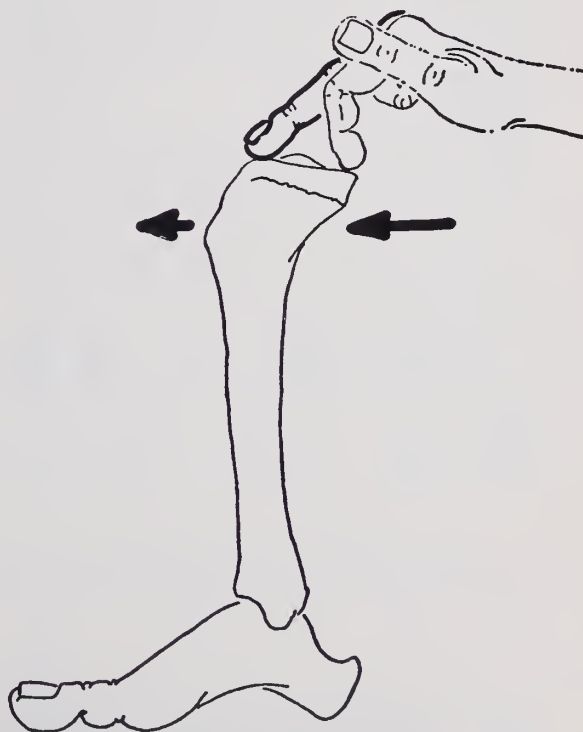


FIG. 2 Using the index and middle fingers of the right hand to represent the cruciate ligaments of the right knee. The middle finger represents the anterior cruciate ligament and is shown in tension, resisting a force displacing the tibial plateau anteriorly.

*Associate Professor of Anatomy, University of Kentucky Medical Center, Lexington
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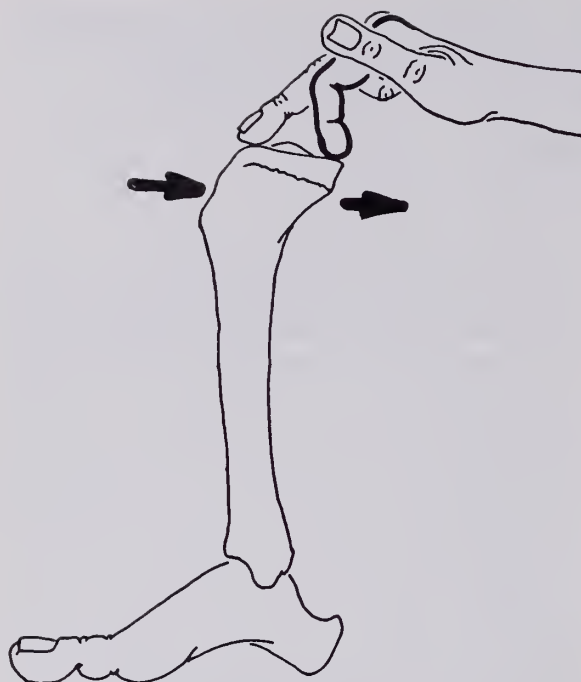


FIG. 3 The index finger represents the posterior cruciate ligament and is shown in tension, resisting a force displacing the tibial plateau posteriorly.

In Figure 3 the index finger represents the posterior cruciate ligament, and it is directed posteriorly. One can visualize how a force tending to displace the tibial plateau posteriorly would be resisted by the posterior cruciate ligament represented by the index finger.

Next, the role of the cruciate ligaments in controlling rotational movements about the knee may be visualized. Leave the crossed fingers of your right hand on top of your right knee as already described and place your right foot on the floor. In Figure 4 you can visualize the action of the cruciate ligaments in controlling the knee in internal rotation, since the fingers representing the cruciate ligaments are twisted tightly together. Figure 5 shows how the posterior cruciate ligament, represented by your index finger, is ineffective in controlling external rotation about the knee. However, notice here that the lateral femoral condyle (represented by the clenched ring and little fingers) impinges upon the anterior cruciate ligament (represented by the middle finger) thereby putting the ligament under tension thus resisting the external rotation. Now one can see how a force imposed against the lateral side of the externally rotated and flexed knee with the foot grounded will cause the anterior cruciate ligament (the middle finger) to be stretched over

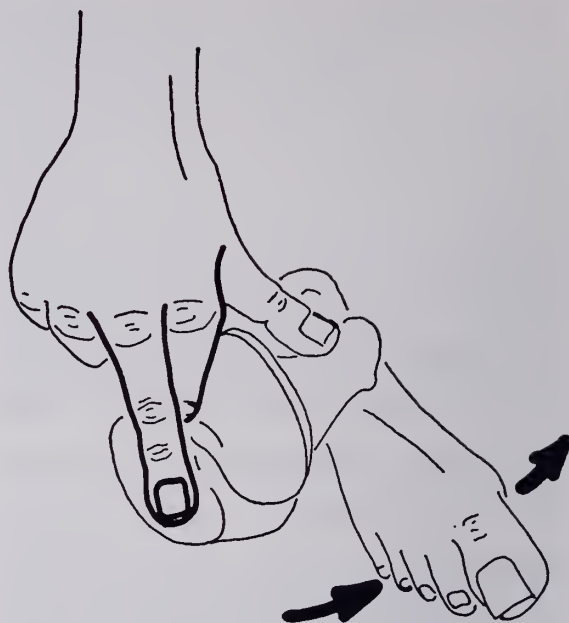


FIG. 4 Right knee in flexion, viewed from above. The middle and index fingers represent the anterior and posterior cruciate ligaments respectively. Both ligaments are in tension, resisting internal rotation of the knee.

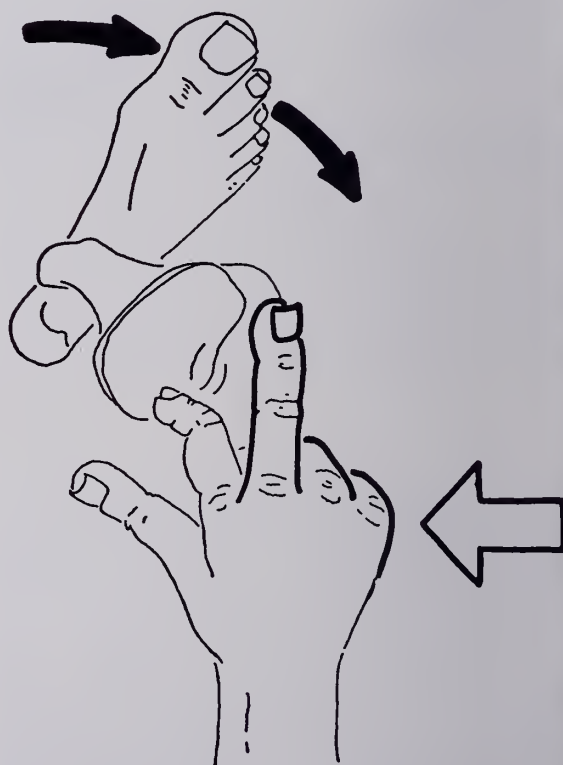


FIG. 5 The combined clenched ring and little fingers represent the lateral femoral condyle impinging upon the anterior cruciate ligament which is thus put under tension and resists external rotation at the knee. A force applied to the lateral side of the externally rotated and flexed knee increases tension on the anterior cruciate ligament and may rupture it.

the lateral femoral condyle (represented by the clenched ring and little fingers) thereby rupturing this ligament. Injuries to the medial collateral ligament, medial meniscus and posterior capsule of the knee joint are also usually seen in this situation. Nicholas* reviews the biomechanics involved in injuries of this sort, and presents a more sophisticated physical examination for their

differential diagnosis than is traditionally employed.

*Nicholas, James A. The Five-One Reconstruction for Anteromedial Instability of the Knee. *Journal of Bone and Joint Surg., American Volume*, Vol. 55-A, No. 5, pp. 899-922, July, 1973.



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This Journal feature will be presented alternately by the University of Louisville and the University of Kentucky Departments of Medicine and Departments of Surgery. We hope to have these features revolve around subjects of immediate practical interests to the practicing physician; and, for those of us not able to attend grand rounds in the teaching centers as often as we might, we hope this will represent a bit of a refresher course.

Deep Venous Cannulation*

PERCUTANEOUS cannulation of the subclavian or internal jugular vein is a widely practiced and generally accepted means of vascular access. A cursory review of the literature on deep venous cannulation from 1968 to 1974 revealed over 11,000 instances of percutaneous cannulation of the deep venous system reported.^{1-4,6,8-13,15} The available evidence indicates that the frequency of this procedure is increasing. At the University of Kentucky Medical Center in 1972 deep venous cannulations were being performed at a rate of 30 a month,¹³ whereas by 1976 the frequency had risen to approximately 100 a month. Despite the obvious popularity and frequency of percutaneous deep venous cannulation there are definite hazards to the procedure which may be minimized by good technique and attention to detail.

There are many potential sites for insertion of deep venous catheters including the veins of the arms, legs, and neck. Deep venous cannulation via retrograde passage of a catheter from the groin is not acceptable except for short term infusions as part of resuscitation from hypovolemic shock because of the high incidence (47% in one series) of infection and thromboembolism.¹⁻³ Superficial veins of the neck and arms have not been completely satisfactory because of an inability to pass the catheter into the central venous system in as many as 50% of patients.^{4,5} Percutaneous cannulation of the deep system through the subclavian or internal jugular route can be rapidly and easily carried out in approximately 95% of patients.^{5,6}

Indications

Basically, there are four indications for deep venous cannulation. (Table 1) (1) It may be indicated when there is an urgent need for large bore venous access. The anatomy of the subclavian and internal jugular veins and their investing fascia within the negative pressure thorax tends to hold these veins open so that they remain accessible in situations of peripheral vascular collapse. (2) The use of deep venous cannulation as a means of hemodynamic monitoring either via the central venous pressure or with a Swan-Ganz catheter has been an invaluable adjunct to fluid therapy in cardiac failure, shock whether hypovolemic, cardiac or septic and in oliguric states. (3) Intravenous hyperalimentation with hyperosmolar solutions is a clearcut indication for central venous cannulation though the advent of isosmolar fat solutions which can be given by peripheral veins may make this indication less frequent. The experience gained with deep venous cannulation for hyperalimentation has led to the widespread use of this technique. (4) The absence of other readily available infusion sites is the most common indication for deep venous cannulation which can be lifesaving. The ill patient on long term therapy who has required multiple vena punctures and cutdowns to the point where peripheral veins are nonexistent is the logical beneficiary of a deep line.

Percutaneous cannulation of the subclavian or internal jugular veins carries a 1-2% risk of life-threatening complications which may be divided into technical problems with insertion of the catheter and maintenance problems. Technical problems which include air embolism pneumothorax, catheter embolism, etc.,^{3,6} are for the most part due to errors in insertion of the deep line.

*From the Department of Surgery, University of Kentucky Medical Center, Lexington

Table 1
INDICATIONS FOR PERCUTANEOUS DEEP VENOUS CANNULATIONS

- I. Rapid Emergency Large Bore Venous Access
- II. Hemodynamic Monitoring (Central Venous or Swan-Ganz)
- III. Intravenous Hyperalimentation
- IV. Lack of Other Readily Available Infusion Sites

(Table 2) Maintenance complications usually arise from contamination of the indwelling catheter.

Techniques

There are several techniques described for safe cannulation of the subclavian or internal jugular vein.^{1,3,6,8-10,12-15} These can be categorized as infra- and supraclavicular approaches to the subclavian vein^{3,6,9,10,12,14} or high and low approaches to the internal jugular vein.^{1,2,8,13,15} (Fig. 1,2,3,-4.) Regardless of technique certain basic principles should be followed.

I. *The patient should be in a head down position.* Many of the complications of deep venous cannulation can be avoided if the patient is placed head down in order to distend the central veins making them easier to cannulate and, thereby, making puncture of other structures less likely. The central venous pressure is elevated by this position which minimizes the hazard of air embolism.

II. *The catheter should be inserted aseptically.*

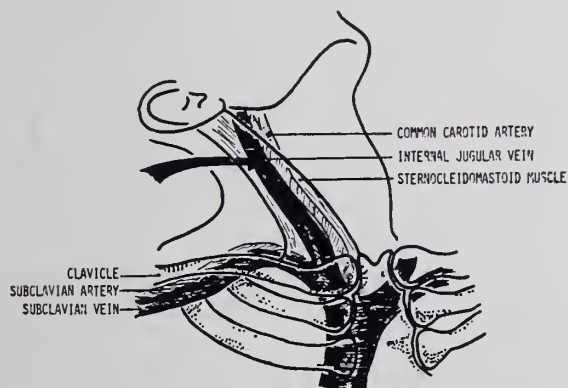


FIG. 1: The high approach to the internal jugular vein depends on tactile separation of the carotid artery from the anterior border of the sternocleidomastoid muscle. While the carotid artery is palpated, the patient's head should be turned away from the site of venapuncture to achieve separation of the carotid from the sternocleidomastoid. The internal jugular vein is entered by inserting the needle posterior to the sternocleidomastoid at a point midway between its bony attachments. The needle is directed in a sagittal plane at angle of 30° to 45° from the horizontal so that the internal jugular is entered behind the midportion of the muscle.

The site of puncture should be carefully prepped and the catheter should be handled only with sterile gloves. The majority of patients requiring central venous cannulation are critically ill and should not be challenged with a contaminated catheter.

III. *Once the catheter is passed through the needle it should not be withdrawn.* If the catheter bends over the tip of the needle and is then pulled back, the needle may cut through, leading to catheter embolization.

IV. *After the catheter is in place, the position should be verified.* As the I.V. bottle is lowered, one should see free flow of blood into the tubing. A chest radiograph should be obtained to verify the catheter position and to look for a pneumothorax.

These guidelines are sufficient for most patients, however, some situations pose unusual risk of complication. Patients who are morbidly obese, severely cachectic, respiratory cripples, agitated or on respirators should be approached very cautiously as candidates for deep venous cannulation. The highest percentage of complications has been with malnourished, very thin patients.

Table 2
COMPLICATIONS OF PERCUTANEOUS DEEP VENOUS CANNULATION

TECHNICAL

Major

- Air Embolism
- Pneumothorax
- Hydrothorax (Intrapleural Administration of Fluid)
- Catheter Embolism
- Cardiac Perforation
- Hemothorax
- Hemomediastinum
- Hydromediastinum (Infusion of Fluid into the Mediastinum)
- Arteriovenous Fistula
- Deep Venous Thrombosis
- Brachial Plexus Injury
- Hemorrhage
- Subcutaneous Emphysema

Minor

- Arterial Puncture
- Hematoma Formation
- Failure of Venapuncture
- Puncture of Trachea, Thyroid, Thymus, etc.

MAINTENANCE

Major

- Systemic Sepsis

Minor

- Local Cellulitis

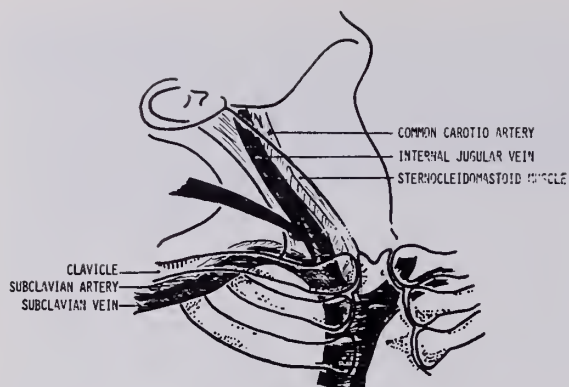


FIG. 2: Low approach to internal jugular vein. The essential landmarks for catheterization of the internal jugular vein with this approach are the sternal and clavicular attachments of the sternocleidomastoid and the clavicle. The internal jugular vein lies in the groove formed by the two heads of the sternocleidomastoid. Venapuncture can be achieved by insertion of the needle between the two heads in a midsagittal plane with the angle of entry approximately 30° from the horizontal. Care should be taken not to direct the needle tip medially for this will miss the jugular and allow puncture of the common carotid.

Sibson's fascia overlying the pleural dome rises high into the neck in these patients so that even small errors in catheter placement can easily lead to pneumothorax. Particular care should be taken in this circumstance to restore vascular volume and to place the patient in a steep head down position so that the central veins are distended prior to attempting cannulation.

When the deep venous catheter is to be used for hyperalimentation, scrupulous care of the catheter site and the infusion apparatus is necessary to prevent sepsis. The dressing overlying the puncture site should be changed at least every 48

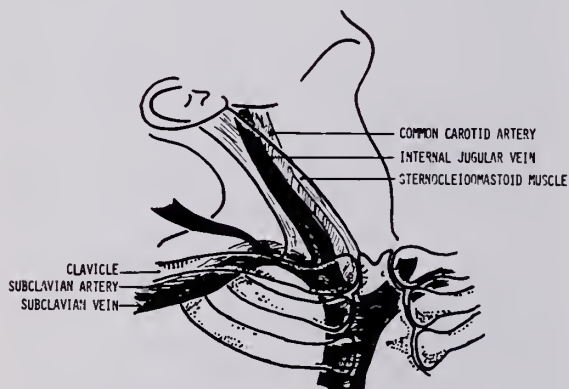


FIG. 3: The supraclavicular approach to the subclavian vein involves the angle between the lateral border of the sternocleidomastoid muscle and the clavicle. The needle is inserted at the tip of this angle at 45° from both the sagittal and transverse planes and advanced anteriorly above the horizontal so that the subclavian vein is entered just behind the clavicular head.

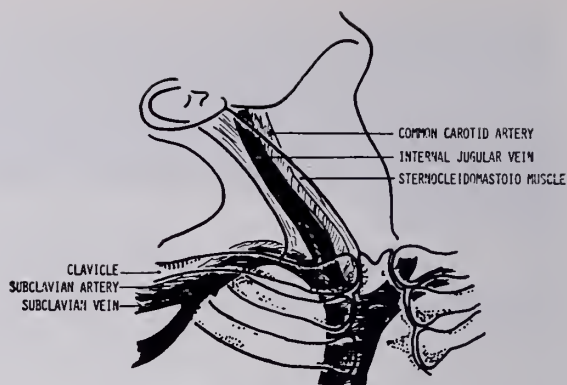


FIG. 4: The infraclavicular approach to the subclavian vein involves insertion of the needle at the junction of the distal and middle third of the clavicle. The needle should be directed parallel to the chest wall beneath clavicle toward the jugular notch.

hours using sterile technique. The infusion apparatus, tubing and fluid container, should be changed every 24 hours. As an additional measure to prevent sepsis use of an in-line final filter, either a 0.45μ or a 0.22μ membrane filter, screens particulates and bacterial contaminants from the patient. Blood samples should not be withdrawn from a catheter used for hyperalimentation nor should blood products be infused through it.

Catheters inserted for emergency vascular access probably should not be left in place longer than 72 hours. In these circumstances the catheter is commonly used for infusion of blood, albumin and other fluids and drugs for resuscitation. Blood samples are also drawn through this line in circumstances where the benefits of the information to be obtained clearly outweigh the additional risk of sepsis.

Deep venous cannulation is a rapid and safe technique for establishing venous access. Implicit in the guidelines for cannulation is the assumption that the physician inserting the catheter has taken the time to learn the regional anatomy and the technique of cannulation. The best way to learn deep venous cannulation is under the supervision of someone experienced with the technique since the incidence of complications varies directly with the experience of the personnel involved.³

BRACK A. BIVINS, M.D.

CHARLES R. SACHATELLO, M.D.

References

1. English, C.W., Frew, R.M., Pigott, J.F., Zaki, M.: Percutaneous Catheterization of the Internal Jugular Vein, *Anaesthesia*, 24:521, 1969.

2. Jernigan, W.R., Gardner, W.C., Mahr, M., Milburn, J.L.: Use of the Internal Jugular Vein for Placement of Central Venous Catheter, *Surg, Gyne. and Obst.* 130:520, 1970.

3. James, P.M., Bevis, A., Myers, R.T.: Experiences with Central Venous and Pulmonary Artery Pressure in a Series of 3,500 Patients, *Southern Med. J.* 65:1299, 1972.

4. Henzel, J.H., DeWeese M.S.: Morbid and Mortal Complications Associated with Prolonged Central Venous Cannulation, *American J. of Surg.* 121:600, 1971.

5. Moran, J.M., Atwood, R.P., Rowe, M.I.: A Clinical and Bacteriologic Study of Infections Associated with Venous Cutdowns, *New Engl. J. of Med.* 272:554, 1965.

6. James, P.M., Myers, R.T.: Central Venous Pressure Monitoring: Misinterpretation, Abuses, Indications and a New Technic, *Ann. of Surg.*, 175:693, 1972.

8. Mostert, W., Kenny, G.M., Murphy, G.P.: Safe Placement of Central Venous Catheter into Internal Jugular Veins, *Arch. of Surg.*, 101:431, 1970.

9. Defalque, R.J.: Subclavian Venipuncture: A Review, *Anesthesia and Analgesia*, 47:677, 1968.

10. Feiler, E.M., deAlva, W.E.: Infraclavicular Percutaneous Subclavian Vein Puncture, *Amer. J. of Surg.*, 118:906, 1969.

11. Bernard, R.W., Stahl, W.M., Chase, R.M.: Subclavian Vein Catheterizations: A Prospective Study, *Ann. of Surg.*, 173:191, 1971.

12. Gallitano, A.L., Kondi, E.S., Dickers, P.J.: A Safe Approach to the Subclavian Vein, *Surg., Gynec. and Obst.*, 135:1, 1972.

13. Hauswald, K.R., Bivins, B.A., Griffen, W.O., Jr.: Analysis of Safety Factors in Percutaneous Deep Venous Cannulation, *Amer. J. of Surg.*, 127:623, 1974.

14. Borja, A.R., Hinshaw, R.: A Safe Way to Perform Infraclavicular Subclavian Vein Catheterization, *Surg., Gynec. and Obst.*, 130:673, 1970.

15. Dailey, P.O., GRIEPP, R.B., Shumway, N.E.: Percutaneous Internal Jugular Vein Cannulation. *Arch. of Surg.*, 101:534, 1970.



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When using neomycin-containing products to control secondary infection in the chronic dermatoses, it should be borne in mind that the skin is more liable to become sensitized to many substances, including neomycin. The manifestation of sensitization to neomycin is usually a low grade reddening with swelling, dry scaling and itching; it may be manifest simply as failure to heal. During long-term use of neomycin-containing products, periodic examination for such signs is advisable and the patient should be told to discontinue the product if they are observed. These symptoms regress quickly on withdrawing the medication. Neomycin-containing applications should be avoided for that patient thereafter.

PRECAUTIONS: As with other antibacterial preparations, prolonged use may result in overgrowth of nonsusceptible organisms, including fungi. Appropriate measures should be taken if this occurs.

ADVERSE REACTIONS: Neomycin is a not uncommon cutaneous sensitizer. Articles in the current literature indicate an increase in the prevalence of persons allergic to neomycin. Ototoxicity and nephrotoxicity have been reported (see Warning section).

Complete literature available on request from Professional Services Dept. PML.



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For prescribing, see complete prescribing information in the package insert, or in PDR, or write from your Pennwalt representative. The following is a brief summary. **Indications:** Zaroxolyn (metolazone) is an antihypertensive indicated for the management of mild to moderate essential hypertension as sole therapy and in the more severe forms of hypertension in conjunction with other antihypertensive agents. Also, edema associated with cardiac failure and renal disease. **Contraindications:** Hypertrophic cardiomyopathy, hepatic coma or precoma, allergy or hypersensitivity to Zaroxolyn. Or, as a routine in other healthy pregnant women. **Warnings:** In patients with a history of allergy to sulfonamide-derived drugs, thiazides or thiazide-like drugs, a cross-allergy may occur in patients with a history of allergy to these drugs. Hypokalemia may occur, and is a potential hazard in digitalized patients; it may be exacerbated by concurrent use of digitalis. Potassium deficiency or fatal arrhythmias may occur. Hypokalemia and hyperuricemia may be noted or exacerbated. Considerable potentiation may occur when given concurrently with furosemide. Use with potassium-sparing diuretics may result in excessive potassium retention and hypokalemia. Administration to women of childbearing age requires that potential benefits be weighed

against possible hazards to the fetus. Zaroxolyn appears in the breast milk. Not for pediatric use. **Precautions:** Perform periodic examination of serum electrolytes, BUN, uric acid, and glucose. Observe patients for signs of fluid or electrolyte imbalance. These determinations are particularly important when there is excessive vomiting or diarrhea, or when parenteral fluids are administered. Patients treated with diuretics or corticosteroids are susceptible to potassium depletion. Caution should be observed when administering to patients with gout or hyperuricemia or those with severely impaired renal function. Hyperglycemia and glycosuria may occur in latent diabetes. Chloride deficit and hypochloremic alkalosis may occur. Orthostatic hypotension may occur. Dilutional hyponatremia may occur in edematous patients in hot weather. **Adverse Reactions:** Constipation, nausea, vomiting, anorexia, diarrhea, bloating, epigastric distress, intrahepatic cholestatic jaundice, hepatitis, syncope, dizziness, drowsiness, vertigo, headache, orthostatic hypotension, excessive volume depletion, hemoconcentration, venous thrombosis, palpitation, chest pain, leukopenia, urticaria, other skin rashes, dryness of mouth, hypokalemia, hyponatremia, hypochloremia, hypochloremic alkalosis, hyperuricemia, hyper-

glycemia, glycosuria, raised BUN or creatinine, fatigue, muscle cramps or spasm, weakness, restlessness, chills, and acute gouty attacks. **Usual Initial Once-Daily Dosages:** mild to moderate essential hypertension—2½ to 5 mg; edema of cardiac failure—5 to 10 mg, edema of renal disease—5 to 20 mg. Dosage adjustment may be necessary during the course of therapy. **How Supplied:** Tablets, 2½, 5 and 10 mg

References:

1. Dornfeld L, Kane R: Metolazone in essential hypertension: The long-term clinical efficacy of a new diuretic. *Curr Ther Res* 18:527-533, 1975
2. Cangiano JL: Effects of prolonged administration of metolazone in the treatment of essential hypertension. *Curr Ther Res* 20:745-750, 1976
3. Data on file: Medical Department, Pennwalt Prescription Products



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"If we fail to use it," he declared to the solemn final meeting of the delegates, "we shall betray all of those who have died in order that we might meet here in freedom and safety to create it."

"If we seek to use it selfishly—for the advantage of any one nation or any small group of nations—we shall be equally guilty of that betrayal."

Fervent Interpolation

The President, speaking in the auditorium of the War Memorial Opera House, built in memory of sons of the Golden Gate city who gave their lives in the first World War, in which he himself served, seemed to give unconscious expression to the solemn feeling of the occasion when, at the outset of his speech, he interpolated the words, half a hope, half a prayer:

"Oh, what a great day this can be in history!"

Just before the plenary session the President commemorated the

Social Security Bill Is Signed Gives Pensions to Aged, Jo

**Roosevelt Approves Message Intended to Benefit 30,
Persons When States Adopt Cooperating Laws—He
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**WASHINGTON, March 10,
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WASHINGTON, Aug.
The Social Security Bill, a broad program of unemployment insurance and old age and counted upon to be 20,000,000 persons, became law when it was signed by President Roosevelt in the presence of those chiefly responsible for its passage, including the man who introduced it through Congress.

Mr. Roosevelt called it "the cornerstone of a new social security system which is being built to meet the needs of the people."

the Draft Ends No

**WASHINGTON, Jan. 27,
1973—"With the signing of
the peace agreement in
Paris today, and after re-
ceiving a report from the
Secretary of the Army that**

PATIENT PACKAGE INSERTS: A CONCEPT WHOSE TIME HAS COME?

The consumer's right to know is an irreversible and desirable trend of the Seventies. It extends, and properly, to a patient's right to know more about his or her prescription medications. One way, gaining favor, is through patient package inserts. Wisely-prepared and properly distributed when medically indicated, they could markedly improve patient knowledge and drug therapy—laudable goals by anyone's standards.

The PMA endorses these goals and will work with government, the health professions and consumers to achieve them.

The Advantages

The concept holds promise of benefits: better patient understanding of the product prescribed, better adherence to the treatment plan, and more awareness of possible side reactions.

Every doctor has had patients who fail to finish antibiotic regimens because they feel better. Some patients assume that if one tranquilizer or analgesic is good, two may be twice as good. Still others fail to report dizziness while on antihypertensive therapy—and so on.

Problems like these might arise less often if the patient received written information in addition to verbal instructions. Some studies suggest that patients are more receptive to such materials, and they more often understand the verbal instructions and follow them, when inserts are used.

The Disadvantages

There are also some potential problems. Obviously, the inserts must be clearly phrased, without extraneous or complex detail. How much information

is enough? How can it be kept current? Should all patients receive the same information? Should inserts be included with all drugs? Should only potential problems be listed or are patients better off with a "fair balance" presentation that describes usefulness as well as drawbacks?

These and similar questions require answers, since model inserts have yet to be properly developed and tested. Despite the need for these studies, the FDA is proceeding prematurely with inserts on selected products. We think the Congress is the only place where the matter can be given the proper legal status and direction, particularly since it represents a conceptual change in the legal, medical and social framework of the nation's prescription drug information system.

The Solution

The PMA believes that carefully-devised pilot studies of various kinds of inserts are needed. They should be developed and implemented with full participation by doctors, pharmacists, consumers, communications experts and the drug industry. Such studies will provide reliable pathways to follow, so that inserts will be useful aids to medical practice.

And particularly we think that you should be closely involved in this debate and in these studies and decisions. Otherwise, people with less experience and qualifications may control the purposes, content and use of a tool with considerable promise for improved patient care. It could make a difference in your practice tomorrow, and more importantly, in the health of your patients.

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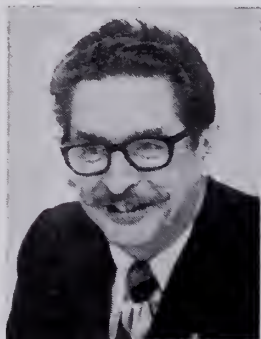
EDITORIAL

Will the Revenue CAP Fit?

"Be assured that proposed cost containment legislation will directly affect your practice."

Wade Mountz

There has been a great deal of interest in the Hospital Cost Containment Act of 1977 and the



Editorial Board has turned to Wade Mountz for comment and advice. A loyal Kentuckian for 27 years, Mountz is President of the Norton-Children's Hospital and was formerly Chairman of the Board and Speaker of the House of the

American Hospital Association. He served as President of the Kentucky Hospital Association (1959-60) and is currently a member of the Board of Commissioners of the JCAH. Mr. Mountz is the latest recipient of the Kentucky Medical Association Award which was presented to him at the 1977 Annual Meeting last month.

WITH the punitive nature of penalties proposed under the Cost Containment legislation neither hospitals or third party payors will risk violation. Decisions will be made in the hospital Finance Department and transmitted to the Admitting Department ("No more elective admissions until the first of the month"), or an operating department ("No diagnostic x-rays except emergencies until the first of the month"). All of this because we are about to exceed our "revenue cap" for the particular month.

All of this is included in "the Hospital Cost Containment Act of 1977." President Carter and Secretary Califano's bill is the most significant proposed federal alteration to the nation's health care system since the enactment of Medicare

and Medicaid over a decade ago. It has been termed a transitional system of hospital cost containment which provides incentives and restraints to contain the rates of increase in hospitals' revenues, control capital allocations, provide a system for publication or disclosure of information useful to the public, and develop permanent reforms in hospital reimbursement.

All that high-sounding verbiage really means is it will control how much *revenue* a hospital will be able to generate. If we were producing in our hospitals each year the same "product" we did last year, the problem would not exist. Unfortunately, no patient or patient's family wants anything but "the best care possible." Likewise, I know of no physician who wishes to practice medicine of a decade ago. You obviously want the latest tests, treatment modalities, medications available, and so does your patient.

That progress in medicine specifically and health in general can be put in "suspended animation" by Congressional mandate is ridiculous to contemplate.

If that is unworkable, what can be done to stem the rising cost of health care, now 8.6% of our gross national product? (Incidentally, this is a figure I do not find unreasonable.) There are some things that can be done. Hospital Boards of Directors, Medical Staffs and Hospital Managements must combine their efforts as never before:

- 1) Every hospital must operate at a reasonable occupancy, phasing out or converting unneeded accommodations to other uses.
- 2) Every hospital must vigorously pursue cost containment in every area of their operation. Every hospital must look at shared services,

consolidations, mergers, as a reality.

3) Out and out competitive activity in communities must be replaced by "What is best for the patients in our service area." Physicians can be the single most potent force in bringing about this philosophical change of attitude.

4) Every medical staff and individual physician must be a part of the cost containment effort.

5) Every test, treatment, or medication ordered for every patient must be even more carefully considered by every physician.

6) Clinical judgment must again be accepted without being additionally supported by "defensive medicine procedures" only for the record.

7) The whole system is geared to the integrity of the physician. Your judgment must prevail—not what you think a court will find appropriate

or what suits the patient, their spouse or mother-in-law.

8) Patients must be made to understand their responsibilities in cost containment. ("If you admit me my insurance or Blue Cross will pay for it," or "Doc, I need to stay an extra day," etc.) At the other end of the spectrum lifestyles of patients must change, i.e., eating habits, weight control, exercise, etc.

9) Our voluntary system is not perfect, but after seeing several other systems in the last few years, I am convinced it is the best around. You as an individual physician must help us demonstrate to our Senators and Congressmen the impact this type of legislation will have on your ability to continue to practice high quality medicine.

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ASSOCIATIONAL NEWS



Dr. Overstreet Named As Editor; Dr. Moss Joins Editorial Board

A. Evan Overstreet, M.D., Louisville, assumed the editorship of *The Journal of the Kentucky Medical Association* at the beginning of the Associational year on September 29. Doctor Overstreet, elected by the Board of Trustees at its August 11 meeting, succeeds John S. Llewellyn, M.D., in that position.



Doctor Overstreet



Doctor Moss

An internist, Doctor Overstreet, served as Assistant Editor from 1972 until February, 1977 at which time he was appointed Associate Editor. A 1955 graduate of the University of Louisville School of Medicine, he is a member of the American Society of Internal Medicine, the American College of Physicians, and the Transylvania Medical Society.

In related action, the Board named James P. Moss, M.D., Louisville, to serve as Assistant Editor. Doctor Moss is a general surgeon and a 1966 graduate of the University of Louisville School of Medicine.

The other members of the Editorial Board, appointed last year, will remain the same. They are: **Assistant Editors:** G. Randolph Schrodtt, M.D., Milton F. Miller, M.D., David L. Stewart, M.D.; **Scientific Editor:** Paul C. Grider, Jr., M.D.; **Assistant Scientific Editor:** Stephen Z. Smith, M.D.

Board of Trustees Digest August 10-11, 1977

A major purpose of the August Board meeting is to review the committee reports prior to their being submitted to the House of Delegates, and record the actions of the Board on each report for consideration by members of the House. Committee Chairmen and Trustees discussed the reports in detail. Additional reports were heard by the Board from the President, the Senior

Delegate to the AMA, the Board of Medical Licensure, and KPRO.

A major and lengthy matter considered by the Board was the consideration of KMA forming a Liability Insurance company. A representative of Marsh & McLennan in Chicago was in attendance and made a detailed presentation on the pros and cons of the formation of such a company, and proposed a feasibility study that would provide KMA with the necessary details to make a sound decision.

A number of legislative matters were considered to include support of the AMA Comprehensive Health Care Insurance Act; matters relating to the Department for Human Resources to include Laboratory Regulations; and approval was given to the Auxiliary for a special day in Frankfort during the 1978 Kentucky General Assembly.

Special recommendations of KMA committees were presented, and approval was given to conduct a Residents' Workshop next April, and for an in-hospital appeals mechanism which has received much work by the Hospital Committee. A nominee for the KMA Judicial Council was approved for presentation to the House of Delegates, and Editor and Assistant Editors were finalized for the *KMA Journal*, with A. Evan Overstreet, M.D. named as Editor.

In other action, nominations were sent to the Governor for appointment to the Comprehensive Health Planning Council and the General Radiation Advisory Committee.

A number of items were then considered relating to plans for the 1977 KMA Annual Meeting, and consideration was given to future meeting sites, but no final action was taken.

In the area of presentations, Past President Hull was presented with bound volumes of the *Journal* published during his tenure as KMA President, and Kenneth P. Crawford, M.D. received a plaque from Blue Cross and Blue Shield for his many years as Chairman of the KMA Advisory Committee to Blue Cross and Blue Shield.

The seventh session planned for the Board of Trustees for this Associational year will be held Sunday, September 25, with the eighth and final session planned for Wednesday, September 28.

Executive Committee August 10

The Executive Committee met on Wednesday, August 10, with Representatives of the Department for Human Resources and the Attorney General's office to discuss the Fraud and Abuse Act and specifically Project Integrity.

The other major subject under consideration by the committee was Liability Insurance and a presentation was made by a representative of Marsh & McLennan to assist KMA in determining whether or not to pursue the formation of a Liability Insurance company.

Alcoholism Forum Scheduled Nov. 10-12 in Lexington

The 1977 Kentucky Alcoholism Forum will be held November 10-12 at the Lexington Civic Center and Hyatt Regency Hotel. Of particular interest to physicians will be two sessions on Thursday, November 10, featuring presentations by Charles Leiber, M.D., and David Knott, M.D., leading authorities in the field of alcoholism.

Doctor Leiber's presentation will begin at 3:45 p.m. and will deal with "Hepatic and Other Medical Complications of Alcoholism." At 7:30 p.m., Doctor Knott will discuss, "Alcoholism—Disease vs. Addiction."

Further information on the annual seminar may be obtained by contacting Raymond P. Daugherty, Executive Director, Kentucky Association on Alcohol Abuse and Alcoholism, 628 N. Broadway, Lexington 40508.



Headquarters Activity

SEPTEMBER

- 1 Executive Committee, Louisville
- Health Care Costs Council, Louisville
- 7 HSA Hearings, Elizabethtown
- 7-9 Professional Convention Management Association, Toronto
- 12 Journal Editors' Meeting, Louisville
- Interim Subcommittee Hearings on Chiropractors and Workmen's Compensation, Frankfort
- 13 Tenth District Trustee Meeting, Lexington
- 14 McDowell House Board of Managers, Danville
- 15 Red Cross Board, Louisville
- 16-17 State Medical Journal Advertising Bureau, New Orleans
- 19 Chamber of Commerce Legislative Class, Frankfort
- 21-23 Southeastern States Legislative Conference, Biloxi, Miss.
- 25 Executive Committee, Louisville
- Board of Trustees, Louisville
- 26 KMA House of Delegates, Louisville
- 27-29 KMA Annual Meeting, Louisville

OCTOBER

- 4-6 Officer-Staff Conference, Louisville
- 10 Journal Editors' Meeting, Louisville
- 18 National Health Insurance Hearings, Lexington
- 19 Judicial Council, Louisville
- 20 Board of Medical Licensure, Louisville
- 27 Blue Cross-Blue Shield Board, Louisville



Did you know . . .

The Department of Human Resources reversed its plans to enforce **laboratory regulations** in private physicians' offices due to prompt action by the KMA Headquarters. A clerical error made when laboratory legislation was enrolled was the basis for DHR's move. However, contact with DHR and a KMA solicited opinion from the Attorney General citing legislative intent produced a revised stand by DHR that exempted physicians who do lab work only for their own patients.

KMA presented comments on the **Health Systems Plan** by HSA West at a hearing in Elizabethtown on September 7, as well as being represented at similar hearings in other locations on the same date.

KMA plans to present testimony at an **NHI hearing** scheduled for October 18 in Lexington. The hearing is one of a series being held by the Department of Health, Education and Welfare at the direction of HEW Secretary Califano.



Members in the news

CAMPBELL-KENTON

James L. Combs, M.D., Covington
Henry A. Wells, M.D., Covington

DAVIESS

Jack R. Newton, M.D., Philpot

JEFFERSON

Jeffrey Callen, M.D., Louisville
Thomas G. Day, Jr., M.D., Louisville
Kenneth Farmer, M.D., Louisville
Richard Garrison, M.D., Louisville
Gabriel Gruber, M.D., Louisville
Joan McGlinn, M.D., Louisville
John McKeown, M.D., Louisville
John R. Morris, M.D., Louisville
Alan Nussbaum, M.D., Louisville
Ronald Richardson, M.D., Louisville
Stephen Sweitzer, M.D., Lexington
Jesse Wright, M.D., Louisville

PENNYRILE (MUHLENBERG)

William L. Miller, M.D., Greenville
Charles F. Winkler, M.D., Central City

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Jose A. Avila, M.D., Pikeville

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MATERNAL MORTALITY



A 27-year-old, married, white gravida 4, para 4, was seen by a physician June 7, 1974. LMP began May 17 and lasted for 10 days. She was taking Norinyl 2 mg and continued to bleed intermittently. She complained of dizziness, cramping and weakness. She weighed 240 pounds, BP was 130/80. The vaginal bleeding was moderate, the uterus was anterior, firm, movable, and normal in size. Hb on admission was 12 gm, hematocrit 36%, WBC 6,900. The pathological report was a "mixture of both proliferative and secretory patterns. There was extensive stromal hemorrhage, breakdown and necrosis." The diagnosis was irregular menstruation.

She was next seen in the emergency room of a different 331-bed hospital at 9:35 a.m. on July 11, 1974, with sudden onset of acute abdominal pain around 8 a.m. the morning of admission. No BP was obtained, fluids were started in the emergency room, she was typed and cross-matched, pulse was 110 per minute; she appeared pale. Her BP was 60/40 at 9:45; pupils reacted to light; and abdomen was obese, tender with rebound. The pelvic examination was difficult to evaluate due to her obesity and pain; the cul de sac seemed to bulge.

She was taken to surgery for cul de sac tap and probable laparotomy. Under general anesthesia started at 10:45 a.m., she was first placed in lithotomy position, prepped and draped in the usual manner. The cervix was grasped with a tenaculum and a needle inserted into the cul de sac with free blood aspirated. 500 cc whole blood was started at 10:50 and second unit was started at 11:10; third unit started at 11:20; and fourth unit started at 11:30. She was placed in a supine position, prepped and draped in the usual manner. The peritoneal cavity was entered with difficulty where there were numerous large blood clots. The pelvic cavity was immediately inspected and a ruptured tubal ectopic pregnancy from the right side was brought over to the operative field and salpingectomy was performed. Hemostasis was complete and inspection of the opposite side revealed multiple adhesions between the tubes and ovaries. Although there was no active bleeding

at this time, the patient's BP was unobtainable by the anesthesiologist. Palpation of the aorta revealed the pulse rate at approximately 110 with good aortic pulsation. She was monitored with a regular sinus rhythm while the abdomen was closed in layers. Again no BP or pulse could be obtained and cardiac monitoring showed no activity; external massage was immediately started.

The patient had been on oxygen for approximately 10 to 15 minutes. There were no complexes on cardiac massage and cardiac injection of 1:1000 Adrenalin Bicarbonate and other cardioresuscitation drugs (Solu Medrol 125 mg 2 cc IV, 4 amp 1/120 gr IV, Queliem 60 mg) were administered IV at 11:35.

A heart beat was obtained with some pulse and blood pressure, however, her pupils were fixed and dilated. Resuscitative measures were carried on for approximately 35 to 40 minutes with no response and the patient was pronounced dead at 12:05 p.m.

The final diagnosis was ruptured right tubal pregnancy; acute shock due to blood loss from rupture; and cardiac arrest. There was no autopsy.

Comment

The Committee classified this as a direct obstetrical death with preventable factors possibly implicating the anesthetic agent although the blood loss with a lack of adequate replacement could well have been the cause of death. This case illustrates again the lack of adequate information when an autopsy was not carried out; however, from the information given to the Committee, it was felt that the two main areas possible for maternal demise were in the area of anesthesia and inadequate blood replacement.

This case is a reminder that an ectopic pregnancy is an exceedingly dangerous complication and does cause maternal mortality. The diagnosis of this emergency condition must be considered in each incidence of irregular menstrual periods during the reproductive years and in case of acute abdominal pain. Time is of upmost importance in establishing this diagnosis.



Natural balance doesn't always come naturally

Big Balanced Rock, Chiricahua Mountains, Arizona (approx. 1,000 tons)

Most Widely Prescribed—Antivert is the most widely prescribed agent for the management of vertigo* associated with diseases affecting the vestibular system such as Menière's disease, labyrinthitis, and vestibular neuronitis.

Relief of Nausea and Vomiting—Antivert/25 can relieve the nausea and vomiting often associated with vertigo*.

Usage for Vertigo*—The usual adult dosage for Antivert/25 is 25 mg. tablet t.i.d.

SUMMARY OF PRESCRIBING INFORMATION

INDICATIONS. Based on a review of this drug by the National Academy of Sciences—National Research Council and/or other information, FDA has classified indications as follows:

Effective: Management of nausea and vomiting and dizziness associated with motion sickness.

Probably Effective: Management of vertigo associated with diseases affecting the vestibular system.

Additional classification of the less than effective indications requires further investigation.

CONTRAINDICATIONS. Administration of Antivert (meclizine HCl) during pregnancy or to women who may become pregnant is contraindicated in view of the teratogenic effect of the drug in rats.

The administration of meclizine to pregnant rats during the 12-15 day of gestation has produced cleft palate in the offspring. Limited studies using doses of over 100 mg./kg./day in rabbits and 10 mg./kg./day in pigs and monkeys did not show cleft palate. Congeners of meclizine have caused cleft palate in species other than the rat.

Meclizine HCl is contraindicated in individuals who have shown a previous hypersensitivity to it.

WARNINGS. Since drowsiness may, on occasion, occur with use of this drug, patients should be warned of this possibility and cautioned against driving a car or operating dangerous machinery.


Usage in Children. Clinical studies establishing safety and effectiveness in children have not been done; therefore, usage is not recommended in the pediatric age group.

Usage in Pregnancy. See "Contraindications."

ADVERSE REACTIONS. Drowsiness, dry mouth and, on rare occasions, blurred vision have been reported.

More detailed professional information available on request.

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Antivert®/25 
(meclizine HCl) 25 mg. Tablets
for vertigo*

TRIAMTERENE CONSERVES POTASSIUM WHILE HYDROCHLOROTHIAZIDE LOWERS BLOOD PRESSURE **DYAZIDE®**

Each capsule contains 50 mg. of Dyrenium® (triamterene, SK&F Co.) and 25 mg. of hydrochlorothiazide.

MAKES SENSE

Before prescribing, see complete prescribing information in SK&F Co. literature or PDR. A brief summary follows:

* Warning

This drug is not indicated for initial therapy of edema or hypertension. Edema or hypertension requires therapy titrated to the individual. If this combination represents the dosage so determined, its use may be more convenient in patient management. Treatment of hypertension and edema is not static, but must be reevaluated as conditions in each patient warrant.

* **Indications:** When the combination represents the dosage determined by titration: Adjunctive therapy in edema associated with congestive heart failure, hepatic cirrhosis, the nephrotic syndrome. Corticosteroid and estrogen-induced edema, idiopathic edema; hypertension, when the potassium sparing action of triamterene is warranted. (See Box Warning.) Routine use of diuretics in healthy pregnant women is inappropriate; they are indicated in pregnancy only when edema is due to pathological causes.

Contraindications: Further use in anuria, progressive renal or hepatic dysfunction, hyperkalemia. Pre-existing elevated serum potassium. Hypersensitivity to either component or other sulfonamide-derived drugs.

Warnings: Do not use potassium supplements, dietary or otherwise, unless hypokalemia develops or dietary intake of potassium is markedly impaired. If supplementary potassium is needed, potassium tablets should not be used. Hyperkalemia can occur, and has been associated with cardiac irregularities. It is more likely in the severely ill, with urine volume less than one liter/day, the elderly and diabetics with suspected or confirmed renal insufficiency. Periodically, serum K⁺ levels should be determined. If hyperkalemia develops, substitute a thiazide alone, restrict K⁺ intake. Associated widened QRS complex or arrhythmia requires prompt additional therapy. Thiazides cross the placental barrier and appear in cord blood. Use in pregnancy requires weighing anticipated benefits against possible hazards, including fetal or neonatal jaundice, thrombocytopenia, other adverse reactions seen in adults. Thiazides appear and triamterene may appear in breast milk. If their use is essential, the patient should stop nursing. Adequate information on use in children is not available.

Precautions: Do periodic serum electrolyte determinations (particularly important in patients vomiting excessively or receiving parenteral fluids).

Periodic BUN and serum creatinine determinations should be made, especially in the elderly, diabetics or those with suspected or confirmed renal insufficiency. Watch for signs of impending coma in severe liver disease. If spironolactone is used concomitantly, determine serum K⁺ frequently; both can cause K⁺ retention and elevated serum K⁺. Two deaths have been reported with such concomitant therapy (in one, recommended dosage was exceeded, in the other serum electrolytes were not properly monitored). Observe regularly for possible blood dyscrasias, liver damage, other idiosyncratic reactions. Blood dyscrasias have been reported in patients receiving triamterene, and leukopenia, thrombocytopenia, agranulocytosis, and aplastic anemia have been reported with thiazides. Triamterene is a weak folic acid antagonist. Do periodic blood studies in cirrhotics with splenomegaly. Antihypertensive effect may be enhanced in post-sympathectomy patients. Use cautiously in surgical patients. The following may occur: transient elevated BUN or creatinine or both, hyperglycemia and glycosuria (diabetic insulin requirements may be altered), hyperuricemia and gout, digitalis intoxication (in hypokalemia), decreasing alkali reserve with possible metabolic acidosis.

'Dyazide' interferes with fluorescent measurement of quinidine.

Adverse Reactions:

Muscle cramps, weakness, dizziness, headache, dry mouth; anaphylaxis, rash, urticaria, photosensitivity, purpura, other dermatological conditions;

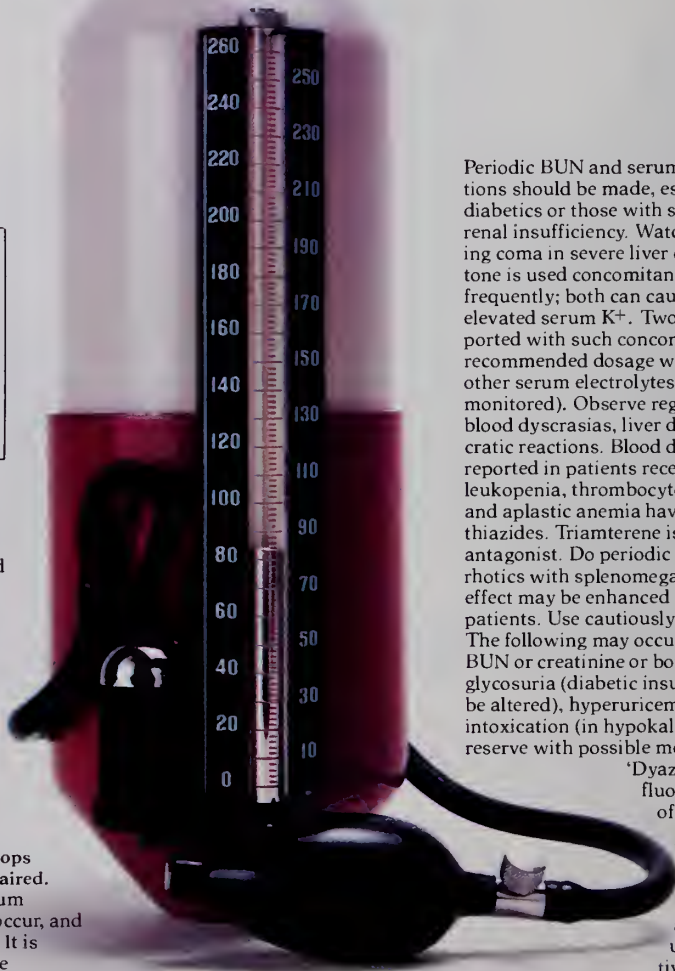
nausea and vomiting, diarrhea, constipation, other gastrointestinal disturbances. Necrotizing vasculitis, paresthesias, icterus, pancreatitis, xanthopsia and, rarely, allergic pneumonitis have occurred with thiazides alone.

Supplied: Bottles of 100 and 1000 capsules; Single Unit Packages of 100 (intended for institutional use only).

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See overleaf for complete listing of postgraduate courses

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Scientific Program

AMA 31st Winter Scientific Meeting

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Medical and Surgical Management of Skin Cancer
Basic Life Support—CPR
Fluid and Electrolyte Balance
Hypoglycemia: Diagnosis and Management
Diagnosis and Treatment of Fractures of the
Lower Extremities
Medical and Surgical Management of Coronary
Vascular Disease
Noninvasive Diagnostic Radiological Techniques
Dermatology for the Nondermatologist
Sports Injuries
Biofeedback and Other Techniques
Clinical Aspects of Immunology
Diabetes: Diagnosis and Management
Psychotropic Drugs: Uses and Abuses
Unsticky Platelets—Loose Clots
Infectious Diseases in Children
Office Gynecology
Drugs: Actions, Reactions, and Interactions
Care of the Critically Ill: Medical and
Surgical Management
Office Endocrinology
Newer Clinical Approaches to the Sexually
Transmitted Diseases

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Epiphyseal Injuries in Children
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Evaluation and Management of the Jaundiced Patient
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Indications for Total Joint Replacement
Management of Acute and Chronic
Pulmonary Problems
Evaluation and Management of Hyperlipidemias
Emergency Medicine for 1978
Pediatric Allergy and Immunology
Management of Renal Failure
Management of Hepatic Problems
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Upper Extremities
The Integration of Adjuvant Modalities in the Treatment
of Cancer
Nephrolithiasis: Diagnosis and Management
Evaluation and Management of Arrhythmias
Current Antibiotic Uses and Abuses
Evaluation and Management of Common GI Problems
Office Orthopedics
Evaluation and Management of Common Urinary
Tract Problems
Use and Consequences of Steroids
Exercise Testing and Physical Fitness Proficiency
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Evaluation and Management of Seizure Disorders
Evaluation and Management of GI Bleeding
Alcohol and Drug Abuse
Advanced Electrocardiography

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Contraindications: Patients with known hypersensitivity to the drug.

Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. As with all CNS-acting drugs, caution patients against hazardous occupations requiring complete mental alertness (e.g., operating machinery, driving). Though physical and psychological dependence have rarely been reported on recommended doses, caution in administering to addiction-prone individuals or those who might increase dosage; withdrawal symptoms (including convulsions), following discontinuation of the drug and similar to those seen with barbiturates, have been reported.

Use in Pregnancy: Use of minor tranquilizers during first trimester should almost always be avoided because of increased risk of congenital malformations as suggested in several studies. Consider possibility of pregnancy when instituting therapy; advise patients to discuss therapy if they intend to or do become pregnant.

Precautions: In the elderly and debilitated, in children over six, limit to smallest effective dosage (initially 10 mg or less per day) to preclude ataxia or oversedation, increasing gradually as needed and tolerated. Not recommended in children under six. Though generally not recommended, if combination therapy with other psycho-

Libritabs® (chlordiazepoxide) available in 5 mg, 10 mg and 25 mg tablets.



tropics seems indicated, carefully consider individual pharmacologic effects, particularly in use of potentiating drugs such as MAO inhibitors and phenothiazines. Observe usual precautions in presence of impaired renal or hepatic function. Paradoxical reactions (e.g., excitement, stimulation and acute rage) have been reported in psychiatric patients and hyperactive aggressive children. Employ usual precautions in treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation have been reported very rarely in patients receiving the drug and oral anticoagulants; causal relation-

ship has not been established clinically.

Adverse Reactions: Drowsiness, ataxia and confusion may occur, especially in the elderly and debilitated. These are reversible in most instances by proper dosage adjustment, but are also occasionally observed at the lower dosage ranges. In a few instances syncope has been reported. Also encountered are isolated instances of skin eruptions, edema, minor menstrual irregularities, nausea and constipation, extrapyramidal symptoms, increased and decreased libido—all infrequent and generally controlled with dosage reduction; changes in EEG patterns (low-voltage fast activity) may appear during and after treatment; blood dyscrasias (including agranulocytosis), jaundice and hepatic dysfunction have been reported occasionally, making periodic blood counts and liver function tests advisable during protracted therapy.

Usual Daily Dosage: Individualize for maximum beneficial effects. *Oral—Adults:* Mild and moderate anxiety and tension, 5 or 10 mg *t.i.d.* or *q.i.d.*; severe states, 20 or 25 mg *t.i.d.* or *q.i.d.* *Geriatric patients:* 5 mg *b.i.d.* to *q.i.d.* (See Precautions.)

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Please see preceding page for a summary of product information.

November 1977
Volume 75
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Cerebral Aneurysms, Vasectomy Reversals,
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MDS

The Journal Of The Kentucky Medical Association

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A character all its own.



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Another important aspect of the clinical character of Valium is safety. Though drowsiness, ataxia and fatigue are possible, these and more serious side effects are rarely a problem. Of course, as with all CNS-acting drugs, patients taking Valium should be cautioned against driving, operating dangerous machinery or the simultaneous ingestion of alcohol.

Unquestionably, many psychotherapeutic agents, including other benzodiazepines, have antianxiety effects. But one fact remains: you get a certain kind of patient response with Valium. It's a response you want. A response you know. A response you trust as part of your overall management of anxiety and psychic tension.

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tension and anxiety

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Tension and anxiety states; somatic complaints which are concomitants of emotional factors; psychoneurotic states manifested by tension, anxiety, apprehension, fatigue, depressive symptoms or agitation; symptomatic relief of acute agitation, tremor, delirium tremens and hallucinosis due to acute alcohol withdrawal; adjunctively in skeletal muscle spasm due to reflex spasm to local pathology; spasticity caused by upper motor neuron disorders; athetosis; stiff-man syndrome; convulsive disorders (not for sole therapy).

Contraindicated: Known hypersensitivity to the drug. Children under 6 months of age. Acute narrow angle glaucoma; may be used in patients with open angle glaucoma who are receiving appropriate therapy.

Warnings: Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anticonvulsant medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms (similar to those with barbiturates and alcohol) have occurred following abrupt discontinuance (convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). Keep addiction-prone individuals under careful surveillance because of their predisposition to habituation and dependence.

Usage in Pregnancy: Use of minor tranquilizers during first trimester should almost always be avoided because of increased risk of congenital malformations as suggested in several studies. Consider possibility of pregnancy when instituting therapy; advise patients to discuss therapy if they intend to or do become pregnant.

Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed; drugs such as phenothiazines, narcotics, barbiturates, MAO inhibitors and other antidepressants may potentiate its action. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.

Side Effects: Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.



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MESSAGE FROM THE PRESIDENT



The Ultimate Decision — Liability Insurance

The physicians of Kentucky have in their possession a questionnaire to indicate their interest (or lack of interest) in participating in a voluntary insurance company to provide umbrella malpractice insurance coverage. The deadline for response was November 7. It is hoped that all physicians will return this inquiry, even if late.

Actuarial studies have indicated that a minimum of 1,000 physicians are requisite for such a company to be fiscally sound. The House of Delegates determined that this inquiry be conducted—if the requisite number are interested, the KMA will proceed expeditiously with formation of the company.

If the physicians interested are less than a thousand, then the KMA Board of Trustees is to seek formation of a voluntary compensation fund by the Legislature that will be constitutional.

It is hoped the physicians recognize the importance of their decision and their self-determining choice. Our own company could have the advantages of our own control, our own management, future writing of primary coverage and other forms of insurance. There are concomitantly risks—such as responsibility for management and unknown future claims exceeding estimates.

On the other hand, we have no guarantee the Legislature would pass another Compensation Fund, and we may have to grant the Insurance Commissioner unlimited power of assessment.

The Board of Trustees awaits your decision—please assist in getting all physicians to return the questionnaire.

JOHN P. STEWART, M.D., President
Kentucky Medical Association



POSTGRADUATE OPPORTUNITIES



IN KENTUCKY

NOVEMBER

- 21 "Progress in Management of Non-Hodgkin's Lymphomas," Louisville Area CME Consortium, Health Sciences Center, University of Louisville, Louisville

DECEMBER

- 1 "New Dimensions in Treating Hypertension"*, by Donald Vidt, M.D. (Cleveland Clinic), Lake Cumberland Medical Center, Somerset
- 8 "Update on Hypertension"*, Gordon Guthrie, M.D. and Russell McAllister, M.D. (University of Kentucky), Pineville Community Hospital, Pineville

JANUARY

- 11-13 "Medical Ethics,"* University of Louisville and University of Kentucky, Galt House, Louisville

*For further information, contact: Frank R. Lemon, M.D., Associate Dean for Continuing Education, University of Kentucky College of Medicine, Lexington 40506

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- 19-24 Eighth Family Medicine Review*, Session III, 50 hrs. AAFP, Category I-AMA Physician's Recognition Award, Fee: \$295, Hyatt Regency Hotel, Lexington

IN SURROUNDING STATES

DECEMBER

- 4-7 AMA House of Delegates Interim Meeting, Palmer House, Chicago
- 10-13 AMA Winter Scientific Meeting, Fontainebleau, Miami Beach

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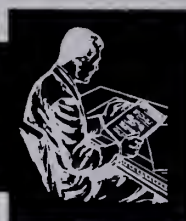
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MATERNAL MORTALITY



This 17-year old, married, white, gravida 1, para 0, LMP was November, 1971, with her EDC July, 1972. She had had vaginal spotting in the third month. She was admitted to a 500-bed hospital at 12:20 p.m., February 20, 1972. She was seen by a private physician twice; initially, for a clinic appointment, then on February 16 when she was considering an induced abortion.

On admission she was thought to be in premature labor. Her weight was 108 lb., temperature 98, pulse 72, blood pressure 190/100. She complained of abdominal cramping and had a small amount of bright red vaginal bleeding. She received 100 mg Visteril IM and IV alcohol. She was checked by her physician at 2 p.m. Her blood pressure was 150/60, pulse 80. She received 50 mg Demerol IM. She felt well enough to eat at 5 p.m. At 9:30 p.m. heavy vaginal bleeding occurred, and she was transferred to the labor area (blood pressure 180/90, pulse 64). There the bleeding was described as small. Her admission Hgb was 5.8 gm, so she was typed and cross-matched for six units of blood and received two. She passed some tissue vaginally and was started on a Pitocin infusion; no FHT was heard. The cervix was still closed and the uterus was six-month size. She passed a large amount of molar tissue with blood clots at 2:35 p.m. on February 21; the uterus was firm, blood pressure 150/80, pulse 84, Platelets 147,000. She was transfused with two more units and the IV was kept open with Ringers Lactate solution. She was started on Methotrexate 50 mg IM for a five-day course on February 22 and a D and C was performed on February 23, 1972. The pathologist reported no evidence of invasion. On the first postoperative day, she was afebrile, WBC normal, Hgb 9.7, SGOT normal, abdomen soft. She had a sore throat on February 23 with a fever for which she received ASA. Her SGOT was 38 at 1:40 p.m., temperature 101; her lungs were clear; she had bilateral CVA tenderness; chest x-ray was reported normal. She was placed on Ampicillin 500 mg qid. Her temperature was 102.8 on February 25 when she received her last dose of Methotrexate; platelets were normal.

She developed a nose bleed on February 26 and mild diarrhea; WBC was 1,200; Hgb 8.6, platelets were moderately depressed and a repeat count that afternoon was 7,000. A repeat chest x-ray that day was read as low-grade pneumonitis with minimal left pleural effusion. She developed what was thought to be a hemorrhagic rash. An oncologist was called for consultation. Cath urine revealed multiple casts, Hgb 7.7. She had some oozing from the IV site. The aspirin and ergotrate were discontinued and Tylenol substituted. The consultant felt she had thrombocytopenia, drug-related. She was transferred to intensive care. Platelets were ordered and until available she was transfused with whole blood. A 24-hour urine gonadotropin level was ordered. She was given 500 mg Keflin qid IV, Garamycin 80 mg, bid IM.

On February 27 her temperature was 101; urine output was described as fair. Her fever persisted through the next day; her urine output was 600 cc, Cl, CO₂, BUN, Platelets 4,000, Hgb 9.1. She had blood in her sputum. Chest x-ray revealed the heart slightly larger; diagnosis was considered to be diffuse pneumonia with possibly some emboli. In spite of platelet replacement plus blood, her Hgb remained low (6.4), Hct 19, Platelets 5,000 on February 29. A repeat bedside chest x-ray on March 1, 1972, was read as some clearing of the left side toward the base. The cardiac enlargement persisted and pulmonary embolus could not be ruled out, but pneumonia was favored as the diagnosis. A hematologist and ENT consultant saw the patient on March 1. On March 2, her platelet count was 30,000 and she seemed to be improving.

She had a cardiac arrest on March 4. She was intubated and cardiac resuscitation was performed unsuccessfully. She expired at 8:40 p.m.

An autopsy was obtained with the following conclusions: The Methotrexate produced a temporary but severe depression of the bone marrow. During this time she also developed ulceration of the lower esophagus. In spite of treatment she had bleeding in the lungs, which was the final factor causing death.

(Continued on Page 557)

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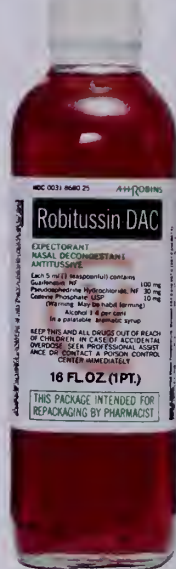
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Volume 75

NOVEMBER 1977

No. 11

Current Trends in Management of Cerebral Aneurysms†

CHRISTOPHER B. SHIELDS, M.D.
Louisville, Kentucky

Major advances in the management of cerebral aneurysms have been made in the past decade. Challenges facing the primary physician and surgeon are evident in the following case reports.

RESPONSIBILITY for recognizing minor symptoms of ruptured aneurysms at the earliest opportunity falls upon the primary physician. Techniques to decrease aneurysm re-bleed, cerebral vasospasm, and cerebral edema as well as surgical treatment of aneurysms will be reviewed.

Case Reports

Case 1: February 1976, a 24-year-old right-handed Army inductee developed an excruciating left frontal headache while doing pushups. He lost consciousness for a few minutes with a subsequent severe, generalized headache, photophobia, and neck stiffness. Lumbar punctures performed over the next few days demonstrated blood in the cerebrospinal fluid (CSF) with xanthochromic supernatant. On transfer to the University of Louisville Health Sciences Center, he was drowsy but responding to spoken word. He had marked nuchal rigidity but no focal neurological signs or retinal hemorrhages. Early conservative management consisted of complete bed rest in a quiet, darkened room, chlorpromazine (Thorazine), phenytoin (Dilantin), and dexamethasone (Decadron).

Bilateral carotid angiography performed eight days postbleed disclosed a left internal carotid bifurcation aneurysm projecting upwards into the anterior perforated substance without associated vasospasm or blood clot (Fig. 1).

Ten days postbleed the aneurysm was clipped, utilizing magnification of 10-16X. Ancillary measures to facilitate aneurysm exposure consisted of mannitol, controlled hypotension, and CSF drainage. The patient was awake, alert, and talking within two hours after the operation without any focal neurological deficit. Postoperative left carotid angiogram performed 10 days later showed non-filling of the aneurysm with the clip across its neck without encroachment on the parent vessel (Fig. 2).

The patient was discharged on the 11th postoperative day neurologically intact. He has continued to do well.

Case 2: A 27-year-old ferris wheel operator developed sudden onset of headache while engaged in sexual intercourse in January 1976. Following a short period of unconsciousness, he noted severe neck and lumbar spine pain as well as photophobia. He was evaluated in the emergency department and discharged on tranquilizing and analgesic medications for tension headaches. Severe generalized headaches, neck stiffness, and low back pain continued unrelieved. Over the following 10 days, the patient experienced numerous episodes of severe occipital pain radiating to the bifrontal region; he also had a generalized seizure. He came to the emergency department a second time for intractable headaches and was admitted to the hospital at that time.

†From the Section of Neurological Surgery, Department of Surgery, University of Louisville School of Medicine
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FIG. 1 Lateral (a) and AP (b) left carotid angiogram demonstrating a cone-shaped aneurysm projecting upwards (black arrow) from the internal carotid artery bifurcation into the anterior perforated substance. No associated vasospasm or intracerebral hemorrhage is noted. The internal carotid artery is marked by two white arrowheads.

On examination the patient was in acute distress from persisting headaches. Marked nuchal rigidity to passive flexion with straight-leg raising limited to 40 degrees bilaterally was noted. Pupils were equal and reactive to light with full range of extraocular muscle activity. A flame-shaped hemorrhage adjacent to the right disc margin was noted on funduscopic exam. Physical examination was otherwise normal. Lumbar puncture disclosed an opening pressure of 240 mm of water and uniformly pink CSF with a yellow supernatant fluid. Bilateral carotid angiography was normal. Four days later left vertebral angiography demonstrated a bilobed basilar bifurcation aneurysm measuring 1×1.5 cm (Fig. 3). Conservative treatment with bed rest, analgesics, fluid restriction, chlorpromazine, and dexamethasone was instituted. Fourteen days postbleed his basilar bifurcation aneurysm was clipped via a right subtemporal approach utilizing hyperventilation, mannitol, and lumbar puncture drainage to facilitate brain retraction. A Heifetz clip was placed across the neck of the aneurysm, isolating it from the general circulation.

Postoperatively he did very well except for a transient right third-nerve palsy. He was bright, alert, and ambulatory two days after the operation. Postoperative angiography showed successful clipping of the basilar bifurcation aneurysm with patency of the posterior cerebral arteries and its perforating branches (Fig. 4).

On follow-up examination two months later the patient was asymptomatic and had resumed working.

Discussion

DIAGNOSIS

Warning signs of **incipient** aneurysmal rupture may occur before the catastrophic ictus. A history of invariable ipsilateral migraine headaches, severe periorbital pain, or significant change in recurring headaches may indicate impending rupture. Such minor symptoms may be interpreted erroneously as influenza, sinusitis, "stiff neck," and so forth.

Warning signs may be headache, lethargy, impairment of extraocular movement, face and eye pain, and neck and back pain. The opportunity to treat an aneurysm at the point of incipient rupture may be lost if the primary physician is not alert to these warning signs. Stretching of the aneurysm sac, minor bleeding, or ischemic effects are the most likely causes of such symptoms. Studies point out that almost 50% of all patients with aneurysms have some warning before the major ictus.¹ The warnings usually occur within three weeks of major hemorrhage.

The unmistakable presentation of a **ruptured** cerebral aneurysm is a sudden and catastrophic headache. The patient usually remembers the time of onset to the finest detail. The most common activities associated with onset of rupture

are lifting, bending, emotional strain, or defecation, although 36% are reported to occur while the patient is sleeping.² If awake, the patient is struck down immediately with an excruciating headache, frequently localized to the side of the aneurysm, and then radiating to the neck. General signs including seizure, coma, nausea, vomiting, photophobia, retinal hemorrhage, and nuchal rigidity may ensue. The presence of focal neurological signs may identify the precise site of the aneurysm: for example, a posterior communicating aneurysm may cause an ipsilateral, fixed dilated pupil; a middle cerebral artery aneurysm may cause a contralateral hemiparesis.

The definitive diagnostic test is cerebral angiography, which is usually performed during the first 24 hours after hospital admission. Customarily, bilateral carotid and selective vertebral angiography are performed by way of a femoral catheterization. Lumbar puncture is not done routinely because it may be falsely negative if carried out too soon after hemorrhage without blood having time to track to the lumbar subarachnoid space, or if the aneurysm has not ruptured into the subarachnoid space but entirely into brain substance or subdural space. Transtentorial or transforaminal impaction may follow lumbar puncture within 12-18 hours if the aneurysm has bled into one of these latter two sites. Theoretically, lumbar puncture may alter the precarious pressure gradient between the aneurysmal lumen and the subarachnoid space and thereby increases the

risk of rebleed in addition to the risk of herniation. Moreover, if CSF is bloody, the etiology may not be apparent because aneurysms, arteriovenous malformations, tumors, blood dyscrasias, traumatic punctures, and head injuries may all produce this finding. Thus, an angiogram is essential to make a precise diagnosis.

A cooperative study² indicates that the common sites of aneurysms are the anterior communicating-anterior cerebral junction (28%), the internal carotid and the origin of its major branches (24%), and the middle cerebral artery trifurcation (12%). Multiple aneurysms occur in 20% of all cases.

Skull x-ray examinations, electroencephalograms, and brain scans utilizing radioactive isotopes are usually not helpful in diagnosis; however, the computerized tomography (CT) scan may be valuable in detecting intracerebral clots and may demonstrate blood in the subarachnoid space in the vicinity of an aneurysm that has bled.³ This can be particularly useful in the patient with multiple aneurysms.

TREATMENT

Once angiographically proven, surgical clipping of an accessible saccular aneurysm is the treatment of choice. Aggressive management is based on the following considerations: 1) less than a 5% mortality and morbidity rate among patients in good condition preoperatively⁴; 2) the probability of rebleeding is 5% per year⁵;

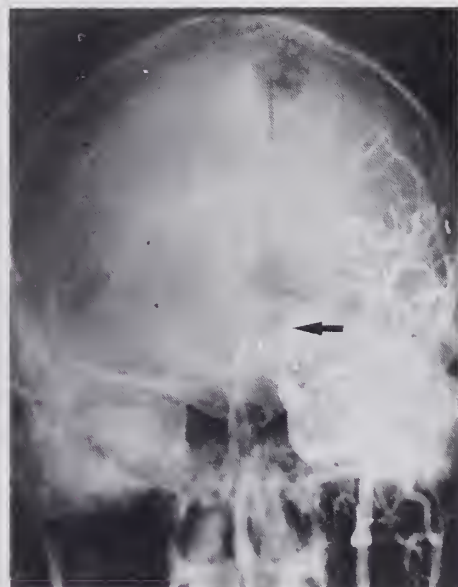
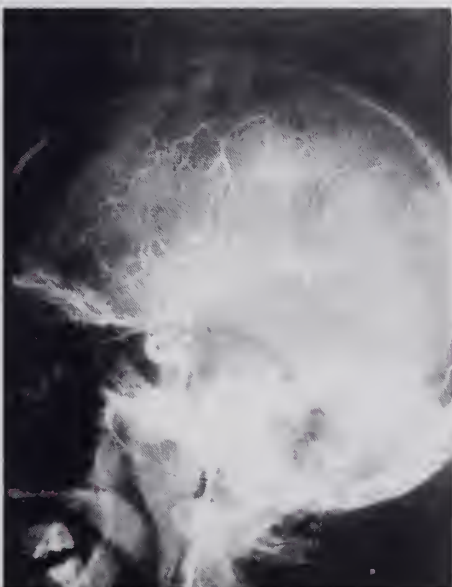


FIG. 2 Postoperative lateral (a) and AP (b) left carotid angiogram demonstrating no filling of the aneurysm (black arrow); however, moderate vasospasm of the supraclinoid internal carotid and anterior cerebral arteries was noted (white arrowheads).

and 3) 45% of the patients whose aneurysms rebleed will die as a result of intracranial hemorrhage. Since the advent of microneurosurgical techniques, operation offers the greatest hope for a normal life span.

An unruptured aneurysm diagnosed incidentally by angiography performed for another reason should usually be managed by operation because 50% will rupture at some time during the patient's lifetime, with an overall mortality rate of 30%.²

Experience has shown that early clipping of the aneurysm following a subarachnoid hemorrhage is associated with a higher complication rate than if operation is postponed 7-10 days. Just why this is true remains an unanswered question, but surgical manipulation superimposed on cerebral vasospasm, cerebral edema, and a congested "angry" brain apparently increases the incidence of postoperative mortality and severe morbidity. Within 7-10 days vasospasm, edema, and congestion usually have subsided. However, the benefits of postponing operation must be weighed against the risks of delay, namely recurrent hemorrhage.

Emergency operation is justified only when an aneurysm has ruptured into the subdural or intracerebral space, producing a major intracranial mass in a clinically moribund patient. An attempt to save the patient's life by clot removal and aneurysm clipping in that situation is made.

During the waiting period of 1-2 weeks, conservative measures to improve the patient's preoperative condition consist of bed rest, mild sedation (e.g., chlorpromazine, phenobarbital), controlled metabolic status (e.g., careful monitoring of electrolytes, osmolality, blood gases), reduction of cerebral vasospasm (using chlorpromazine, isoproterenol, and lidocaine), control of blood pressure, and prevention of clot fibrinolysis (with epsilon-aminocaproic acid).

Cerebral vasospasm. Constriction of the arteries of the brain occurs in approximately 30-50% of ruptured aneurysms.^{6,7} Vasospasm may be focal in the region of the aneurysm or generalized to involve any number or all intracranial cerebral vessels. There are two phases of vasospasm:

1. The phase of short duration (5 to 15 minutes) occurs in the vicinity of the aneurysm as a result of arterial manipulation (e.g., arterial rupture, direct mechanical or electrical stimulation). This primary phase is of little clinical importance and rarely is seen angiographically. Topical papaverine at operation will promptly relieve focal primary spasm but has no effect on secondary spasm.

2. The secondary phase of spasm begins approximately three days after the subarachnoid hemorrhage, is maximal at 5-7 days, and usually subsides over the next 5-7 days. Prolonged spasm lasting 2-4 weeks is rarely seen.

The pathogenesis of secondary spasm is not

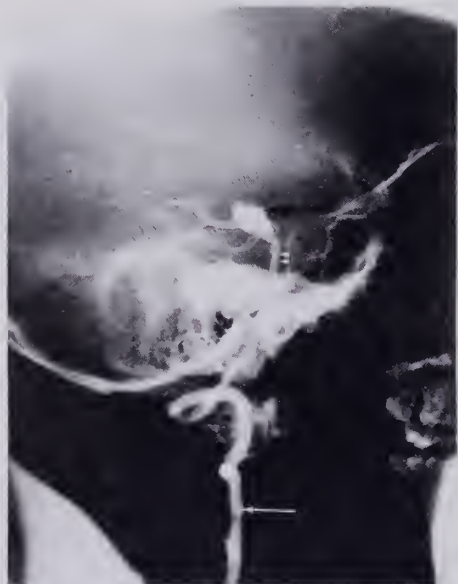


FIG. 3 Lateral (a) and AP (b) left vertebral angiogram showing a large bilobed saccular aneurysm projecting upwards from the basilar artery bifurcation (black arrow). The dome lies in the interpeduncular fossa and is likely embedded in midbrain. Mild basilar artery vasospasm is noted on the AP view (arrowheads). The white arrow points to the left vertebral artery.

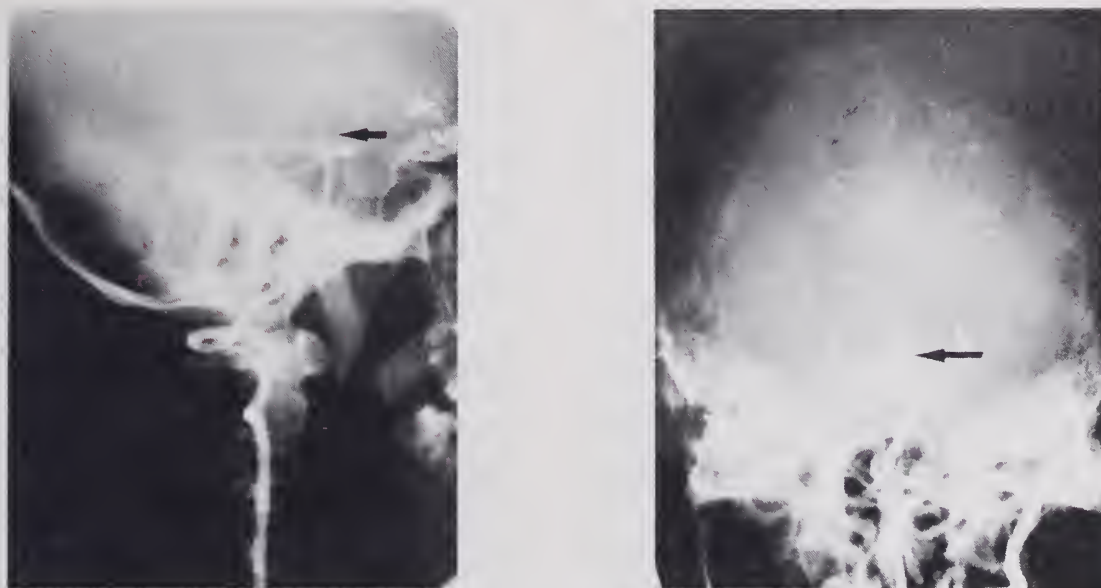


FIG. 4 (a and b) Postoperative view shows non-filling of the aneurysm (black arrow). No evidence of vasospasm or blood clot is noted, and all major branches of the basilar bifurcation are filling well.

completely understood and its treatment remains empirical. Virtually all components of hemolyzed autogenous blood and lysed platelets have been implicated as the vasospastic component (e.g., serotonin, histamine, epinephrine, norepinephrine, angiotensin, ADP, bradykinin, acetylcholine, and prostaglandin).⁸ Attempts to relieve vasospasm by using drugs antagonistic to each of these substances have failed. Perhaps an additive or synergistic activity of two or more of these substances is the "spasmogenic compound". We use chlorpromazine (10 to 25 mg four times per day) for its mild antiserotonergic, antihypertensive, and sedative effect. Various combinations of drugs such as phenoxybenzamine^{9,10} and isoproterenol-lidocaine cocktail¹¹ have provided variable results.

The intensity of vasospasm often shows a rough correlation to the patient's neurological status, but occasionally widespread, marked vasospasm is associated with normal mentation. The clinical state is of greater importance than angiographically-proven vasospasm, and operation may be carried out in an alert, oriented patient despite persisting vasospasm.

Presumably, vasospasm in the vicinity of the ruptured aneurysm is protective against further hemorrhage. However, recent studies¹² showed that the incidence of rebleed is 11% in patients without spasm compared with 21% in patients with focal or generalized spasm over a two-week postbleed period.¹² Thus, the protective influence

attributed to spasm may not be as important as once thought.

Neurological deficits after hemorrhage are also related to slow circulation, embolic phenomena, arterial thrombosis, cerebral edema, intracranial clot, and communicating hydrocephalus. Following rupture, the aneurysm is tamponaded by clot which plugs the rent in its wall. Hypotensive therapy, antifibrinolytic agents, and avoidance of lumbar punctures all help to maintain clot stability.

Control of blood pressure. Controlled hypotension has been advocated to decrease the incidence of aneurysmal rebleed and possibly the intensity of headaches. Slosberg¹³ suggests hypotension as the treatment of choice for all ruptured intracranial aneurysms, both preoperatively and for those few inoperable aneurysms (e.g., patients over 70 years of age, with complicated medical illnesses, and inaccessible aneurysms). He advocates induced hypotension whether the patient is normotensive or hypertensive when first admitted. Slosberg uses a combined intravenous rauwolfia and thiazide therapy with dosages titrated to maintain blood pressure 30 to 40 mmHg above that at which symptoms of cerebrovascular insufficiency occur.

This mode of treatment has not been accepted widely. Mild-to-moderate hypertension following subarachnoid hemorrhage may be a protective mechanism whereby an increased blood pressure maintains cerebral perfusion through vasospastic

arteries, particularly if intracranial pressure is elevated. However, severe hypertension may significantly increase the incidence of aneurysmal re-rupture. Thus, for arterial pressure greater than 180 mmHg systolic, we advocate lowering it to 150 to 160 mm Hg systolic, provided the patient does not develop symptoms of cerebrovascular insufficiency. If previously hypertensive, extreme caution is taken in lowering blood pressure to avoid cerebral ischemia and infarction. Chlorpromazine alone usually will lower arterial pressure to acceptable levels; rarely is it necessary to resort to ganglionic blocking agents. Chronic, mild hypotensive therapy may be justified in the poor risk, elderly, hypertensive patient or a patient who refuses operation. The Cooperative Aneurysm Study¹² found no strong evidence that hypotensive treatment has any effect on the initial bleed, incidence of rebleed, or subsequent mortality.

The only clear indication for hypotensive therapy is intraoperatively during aneurysm dissection. Induced hypotension in the range of 50-60 mmHg mean arterial pressure greatly facilitates vessel and aneurysm manipulation, and, if the aneurysm ruptures at this time, bleeding is easier to control.

Prevention of clot fibrinolysis. For years, urologists have utilized antifibrinolytic agents to stop troublesome bleeding from raw vascular surfaces after prostatic operations. Following this example, several centers¹²⁻¹⁶ investigated whether epsilon-aminocaproic acid (EACA) and amino-methylcyclohexane carboxylic acid (AMCA), both antifibrinolytic agents, might delay lysis of the perianeurysmal clot. The mechanism of action is presumed to be competitive inhibition of the activator which converts plasminogen to the enzyme plasmin. There may also be a direct inhibition of plasmin of secondary importance.

EACA dosage is 2-3 gm per hour administered intravenously as soon as subarachnoid hemorrhage is diagnosed and continued until the day of operation, maintaining a blood level of approximately 13-15 mg%. Recently, doses of 4 gm per hour have been advocated. If the patient is alert, administration may be oral. Even large doses are free from major complications, but dizziness has been reported. Whether a higher incidence of normal pressure hydrocephalus follows its use has not been ascertained.

Active fibrinolytic agents in CSF normally complete clot dissolution by 7-10 days, which

corresponds to the period of greatest danger for rebleed. Any method delaying clot absorption by 7-14 days would be highly desirable, as this would delay re-hemorrhage until after the period of maximal vasospasm. Other theoretical benefits of delayed dissolution are 1) preventing release of spasmogenic substances from the clot and 2) allowing more time for spontaneous endothelial and fibrous tissue repair of the aneurysmal defect.

Mullan and Dawley¹⁴ noted two instances of rebleeding among 35 patients followed for periods of several days to six weeks. The Cooperative Aneurysm Study¹² collected information on five patients or 5.8% who rebled among a total of 85 patients given EACA alone (24-36 gm daily) during a two-week period, as compared with a rebleeding incidence of approximately 20% over a similar period in a control group. Some investigators^{15,16} believe the incidence of rebleed is not lessened significantly following EACA administration.

RESULTS OF OPERATION

Enormous strides in surgical technique have been made with the introduction of the dissecting microscope. As well as affording magnification of 10-25X which allows easy visualization of important vascular structures, it provides superb coaxial illumination into a narrow, deep exposure. Spring-loaded aneurysm clips have been designed which have little tendency to slip off, transect the neck of the aneurysm, or demonstrate late fatigue. No less important to the favorable surgical results are advances in neuroanesthesiology, particularly 1) neurolept analgesics, 2) controlled profound hypotension with trimethaphan camsylate (Arfonad) and sodium nitroprusside (Nipride), and 3) controlled ventilation with manipulation of blood gases.

Relief of brain swelling and facilitation of aneurysm exposure are affected by dexamethasone (begun three days preoperatively), mannitol (1.5 gm/kg body weight given at the time of scalp incision), CSF drainage via lumbar puncture or ventricular tap, and hypocapnia which decreases cerebral blood volume.

During aneurysm dissection and clip application, mean arterial pressure is lowered to 50-60 mmHg. Following clip placement, the blood pressure is returned to normal while the clip is observed. The clip may occasionally "walk" back off the aneurysm as intraluminal pressure increases,

requiring reapplication.

Results of aneurysm operations are rewarding. If the patient is awake preoperatively, he probably will be awake and talking within 30-60 minutes postoperatively. This is quite unlike the results of 20 years ago when a high mortality and morbidity rate followed aneurysm operation. Good-to-excellent results depend primarily on the preoperative status of the patients.

Older techniques of management such as carotid ligation, trapping, and muscle coating of the aneurysm are justified only in very rare instances.

COMPLICATIONS

In addition to major focal neurological deficits which may persist after aneurysmal rupture or operation, the syndrome of normal pressure hydrocephalus following subarachnoid hemorrhage and/or intracranial operation is now recognized as occurring in 10% of patients.⁴ Clinical presentation is a triad of confusion and disorientation, gait ataxia, and urinary incontinence. Scarring of the subarachnoid spaces either at the tentorial notch or over the cerebral convexities provides a pressure differential between the subarachnoid space and ventricle, resulting in ventricular expansion. If spontaneous resolution does not occur within 2-3 weeks, a diverting shunt from the lateral ventricle to the peritoneal cavity or right atrium will drain unabsorbed CSF, often effecting marked clinical improvement.

Summary

Awareness of the early warning symptoms of an enlarging aneurysm and minor subarachnoid hemorrhage followed by complete investigation including angiography will save many patients from subsequent major subarachnoid hemorrhage and death. Successful, definitive treatment of the

large majority of patients with an intracranial aneurysm is now possible with current methods of preoperative support, neuroanesthesiology, and surgical technique. Today there is every reason for optimism in the treatment of cerebral aneurysm with a well-organized team approach.

References

1. Okaware, S.H.: Warning signs prior to rupture of an intracranial aneurysm. *J. Neurosurg.* 38:575-580, 1973
2. Sahs, A.L., Peret, G.E., Locksley, H.B., et al (eds.): *Intracranial Aneurysms and Subarachnoid Hemorrhage: A Cooperative Study.* Philadelphia: J.B. Lippincott Co., 1969.
3. Ethier, R.: Computerized axial tomography in neurological surgery. *Interdisciplinary Symposium, American College of Surgeons Meeting*, Chicago, Ill., October 1976.
4. Krayenbuhl, H.A., Yasargil, M.G., Flamm, E.S., et al.: Microsurgical treatment of intracranial saccular aneurysms. *J. Neurosurg.* 37:678-686, 1972.
5. Jane, J.: Natural history of subarachnoid hemorrhage: Long-term prognosis. *Congress of Neurological Surgeons Meeting*, New Orleans, La., October 1976.
6. Heilbrun, M.P.: The relationship of neurological states and the angiographical evidence of spasm to prognosis in patients with ruptured intracranial saccular aneurysms. *Stroke* 4:973-979, 1973.
7. Odom, G.L.: Cerebral vasospasm. *Clin. Neurosurg.* 22: 29-58, 1975.
8. Echlin, F.A.: Causative mechanisms in cerebral vasospasm. In Smith, R.R., and Robertson, J.T. (eds.): *Subarachnoid Hemorrhage and Cerebrovascular Spasm.* Springfield, Illinois: Charles C. Thomas, 1975.
9. Flamm, E.S., Yasargil, F.G., and Ransohoff, J.: Control of cerebral vasospasm by parenteral phenoxybenzamine. *Stroke* 3:421-426, 1972.
10. Cummins, B.H., and Griffith, H.B.: Intracarotid phenoxybenzamine for cerebral arterial spasm. *Br. Med. J.* 1:382-383, 1971.
11. Sundt, T.M., Jr., Onofrio, B.M., and Merideth, J.: Treatment of cerebral vasospasm from subarachnoid hemorrhage with isoproterenol and lidocaine hydrochloride. *J. Neurosurg.* 38:557-560, 1973.
12. Nibelink, D.W., Sahs, A.L., and Knowler, L.A.: Antihypertensive and antifibrinolytic medications in subarachnoid hemorrhage and their relation to cerebral vasospasm: A report of the Cooperative Aneurysm Study. In Smith, R.R., and Robertson, J.T. (eds.): *Subarachnoid Hemorrhage and Cerebrovascular Spasm.* Springfield, Illinois: Charles C. Thomas, 1975.
13. Slosberg, P.S.: The current status of medical treatment of intracranial aneurysms. In *Progr. Neurol. Surg.* Chicago: Year Book Medical Publishers, 1969, vol. 3, pp. 230-248.
14. Mullan, S., and Dawley, J.: Antifibrinolytic therapy for intracranial aneurysms. *J. Neurosurg.* 28:21-23, 1968
15. Guinn, J. P.: The use of antifibrinolytic agents in the preoperative treatment of ruptured intracranial aneurysms. *Trans. Am. Neurol. Assoc.* 98:150-152, 1973.
16. Gibbs, J. R., and O'Gorman, P.: Fibrinolysis in subarachnoid hemorrhage. *Postgrad. Med. J.* 43:779-784, 1967.

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Vasectomy Reversal: Review and Assessment of Current Status†

ARNOLD M. BELKER, M.D., ROBERT D. ACLAND, M.D., THOMAS L. ROBERTS, III, M.D. and MARK S. SEXTER, M.D.

Louisville, Kentucky

Increasing numbers of men are seeking vasectomy reversal, but until recently results of reversal were disappointing. Pertinent factors affecting results of vasectomy reversal are reviewed, and attention is called to a method of vas deferens anastomosis which offers markedly improved results.

AS a result of population increases and changing social patterns, contraception and sterilization for men have received increasing attention. Although reversible vas occlusive devices once were considered promising for fertility control,¹ they have not been perfected, and continuing technical problems with such devices make their future role highly questionable. The alternative of an oral contraceptive agent for men has been explored without current success.²

Approximately one million men in this country undergo bilateral vasectomy annually. Because of either loss of children or change in marital partners, increasing numbers are seeking vasectomy reversal (vasovasostomy).

Poor results of vasectomy reversal have led to the development of many methods of anastomosis of the vas deferens; at present, no one method is accepted generally.³ Some surgeons use non-absorbable, removable stents for anastomosis, but obstruction of the vas at the site of exit of the stent through the wall of the vas deferens has been reported.⁴ Other surgeons obtain better results without stents.⁵ Use of absorbable intravascular stents also has been reported,⁶⁻⁸ but clinical

series are not yet sufficiently large to be meaningful.

The best type of suture material for vasovasostomy has also been investigated without general agreement.^{6,7,9}

Regarding anastomotic technique, most surgeons have sutured only the muscular layer of the vas; others^{4,5} have used at least several full thickness sutures to achieve better mucosal alignment. The lack of agreement concerning the best surgical method of anastomosis results from technical problems relative to the small size of the vas lumen (average diameter 0.8 mm).¹⁰ Dilation of the obstructed testicular end of the vas after vasectomy gives a luminal diameter almost double that of the unobstructed, urethral end¹¹ and compounds the difficulty of anastomosis.

Until recently, vasectomy reversal has resulted in the appearance of sperm in the semen of 60% to 80% of patients, with pregnancy occurring in only 25% to 35% of their wives.¹² This discrepancy between "sperm appearance" and pregnancy rates has been attributed to the development of sperm antibodies in 35% to 50% of vasectomized men,¹³⁻¹⁶ with antibodies often persisting after vasectomy reversal. The role of these antibodies remains uncertain because pregnancy occurs frequently in the wives of men with persisting sperm antibody levels after vasovasostomy.¹⁷

Silber^{18,19} described microsurgical vasovasostomy, with separate mucosal (10-0 nylon) and muscular (9-0 nylon) layer approximation. His reported results²⁰ are superior to those of other surgeons. If vasovasostomy was performed less than 10 years after vasectomy, 90% of patients achieved *normal semen analysis*, contrasted to the 60% to 80% "sperm appearance" rate following other methods. If performed more than 10 years after vasectomy, reversal produced normal semen analyses in 50% of his patients. Silber reports a 75% pregnancy rate within one

†From the Sections of Urology, Plastic and Reconstructive Surgery and the Microsurgery Laboratory, Department of Surgery, University of Louisville School of Medicine

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FIG. 1. Suturing partially completed in the mucosal layer, revealing accuracy of approximation with microsurgical two-layer technique.

year after vasovasostomy if the reversal is performed within ten years after vasectomy. Similar results are reported by Owen²¹ in Australia, who has used this microsurgical two-layer method for several years. A pregnancy rate of 75% is that expected in the general population after one year of attempted conception.

Silber also reported that vasovasostomies performed later than ten years after vasectomy resulted in lower pregnancy rates.

An exciting aspect of this new method is that Silber obtained good results with patients in whom previous attempts at vasovasostomy by conventional anastomotic methods had failed.²⁰ All such patients had extremely low sperm counts or azoospermia attributed to "sperm antibody effect" following conventional methods of anastomosis. At re-operation all were found to have a strictured lumen (with sperm granuloma present) as the actual cause for low sperm counts. Nine of 10 now have normal sperm counts following two-layer microsurgical anastomosis.

Because of the improved anatomic appearance (Fig. 1) and the improved clinical results of the two-layer microsurgical method, the authors have undertaken its use. Difficulties in developing technical skills with the technique, and a method of preserving human vasectomy specimens for laboratory practice to perfect these skills, have been reported.^{22,23} These difficulties have prompted the authors to assess the suitability of a modified, simpler microsurgical anastomotic method.

Summary

Various aspects of vasectomy reversal are presented. A new microsurgical anastomotic method offers pregnancy rates comparable to those in the normal population.

References

1. Hulka, J.F., and Davis, J.E.: Vasectomy and reversible vasocclusion. *Fertil. Steril.* 23:683, 1972.
2. Bremner, W.J., and de Kretser, D.M.: The prospects for new, reversible male contraceptives. *N. Engl. J. Med.* 295:1111, 1976.
3. Bradshaw, L.E.: Vasectomy reversibility—A status report. *Population Reports Ser. D*, No. 3, May 1976.
4. Fernandes, M., Shah, K.N., and Draper, J.W.: Vasovasostomy: Improved microsurgical technique. *J. Urol.* 100:763, 1968.
5. Schmidt, S.S.: Principles of vasovasostomy. *Contemp. Surg.* 7:13, 1975.
6. Montie, J.E., Stewart, B.H., and Levin, H.S.: Intravascular stents for vasovasostomy in canine subjects. *Fertil. Steril.* 24:877, 1973.
7. Montie, J.E., and Stewart, B.H.: Vasovasostomy: Past, present and future. *J. Urol.* 112:111, 1974.
8. Farcon, E., Hotchkiss, R.S., and Nuwayser, E.S.: An absorbable intravascular stent and a silicone intravascular reversible plug. Report of experiments on animals. *Invest. Urol.* 13:108, 1975.
9. Shelor, W.C., Jr., and Witherington, R.: Comparison of polypropylene and polyglycolic acid suture in experimental vasovasostomy. A preliminary report. *Invest. Urol.* 13:223, 1975.
10. Brueschke, E.E., Burns, M., Maness, J.H., Wingfield, J.R., Mayerhofer, K., and Zaneveld, L.J.D.: Development of a reversible vas deferens occlusive device. I. Anatomical size of the human and dog vas deferens. *Fertil. Steril.* 25:659, 1974.
11. Schmidt, S.S., and Brueschke, E.E.: Anatomical sizes of the human vas deferens after vasectomy. *Fertil. Steril.* 27:271, 1976.
12. Derrick, F.C., Jr., Yarbrough, W., and D'Agostino, J.: Vasovasostomy: Results of questionnaire of members of the American Urological Association. *J. Urol.* 110:556, 1973.
13. Phadke, A.M., and Padukone, K.: Presence and significance of auto-antibodies against spermatozoa in the blood of men with obstructed vas deferens. *J. Reprod. Fertil.* 7:163, 1964.
14. Schmidt, S.S.: Vas anastomosis: A return to simplicity. *Brit. J. Urol.* 47:309, 1975.
15. Ansbacher, R., Keung-Yeung, K., and Wurster, J.C.: Sperm antibodies in vasectomized men. *Fertil. Steril.* 23:640, 1972.
16. Alexander, N.J., Wilson, B.J., and Patterson, G.D.: Vasectomy: Immunologic effects in rhesus monkeys and men. *Fertil. Steril.* 25:149, 1974.
17. Sullivan, M.J., and Howe, G.E.: Correlation of circulating antisperm antibodies to functional success in vasovasostomy. *J. Urol.* 117:189, 1977.
18. Silber, S.J.: Microsurgery in clinical urology. *Urology* 6:150, 1975.
19. Silber, S.J.: Microsurgical technique for reversal of vasectomy. *Surg. Gynecol. Obstet.* 143:631, 1976.
20. Silber, S.J.: Perfect anatomical reconstruction of vas deferens with a new microscopic surgical technique. *Fertil. Steril.* 28:72, 1977.
21. Owen, E.: Quoted by Silber in Reference 20.
22. Belker, A.M., Acland, R.D., and Juhala, C.A.: Microsurgical two-layer vasovasostomy: A word of caution. Read at annual meeting of Southeastern Section of the American Urological Association, Inc., New Orleans, Louisiana, March 27-31, 1977.
23. Belker, A.M., Acland, R.D., Sexton, M.S., and Roberts, T.L., III: Microsurgical two-layer vasovasostomy: Laboratory use of vasectomized segments. Read at Ninth World Congress of Fertility and Sterility, Miami Beach, Florida, April 12-16, 1977.

Placebo: A Place in Medical Therapy?

JAMES F. KADLEC, M.D. and NUHAD D. DINNO, M.D.*

Louisville, Kentucky

Effects, reactors, and physician attitudes about placebos are discussed. Special attention is given to potential reactions by physicians upon encountering such placebos as laetrile.

SINCE the advent of society there have always been practitioners of the healing art, from whom the sick of mind or body received curative powders and potions. Today, however, calculating scientists can inform us that physicians practicing more than a hundred years ago had little to offer but citrus for scurvy, opium for pain, and a few cathartics and emetics. It is only in the past hundred years that the physician has had at his command the means to effect aseptic wound cleansing. It is yet even in the life span of many of today's medical practitioners that the patient has benefitted from such things as insulin, antibiotics, steroids, diuretics, or tranquilizers.

Is it conceivable that charlatans masquerading as physicians have gone undetected for centuries? Could such chicanery have gone on for this length of time or is it more likely that physicians have practiced the healing art, and done it well, with placebos as their principal armamentaria?

It is unlikely that one can complete his medical education without exposure at some time to historical accounts of consumed medicinals which include dung or blood from almost every animal, horns and hooves of cattle and goats, earthworms, ants, spiders, dried flies and vipers, fur, feathers, hair, and perspiration. Patients have been subjected to leeching, blistering, heating, and freezing.^{1,2} Yet, through all of this the physician has occupied a position of honor and respect. Does this not, in itself, testify to the tremendous healing power of the placebo?

At present the placebo has fallen into disfavor.

With the recent wave of court rulings which require the physician to keep the patient well informed regarding medication and procedures only the more daring continue placebo treatment. The patient has at the same time become more aggressive, demanding more information about his treatment. The medical school espouses a new scientific attitude, admonishing the student to use effective drugs or use no drugs.³

In spite of present ideas, the speaker at a recent psychiatric grand rounds commented, "I used to be irritated with the surgeons who would let themselves be backed into a corner by patients, then cut themselves out, but now I see that we (psychiatrists) pill our way out." This statement indicates that the physician all too often is belabored into supplying scar or pill. It is doubtful that most practicing physicians are immune from the same pressure, and do not supply the same therapy. This same large population, however, does not prescribe placebos, or do they?

Although placebos have been defined in numerous ways,⁴ for the purpose of this discussion it is considered to be any drug or procedure producing an effect for which there is no known scientifically related activity. The placebo need not be oral medication. Parenteral saline has great effect,⁵ and who has not been exposed to the willing testimony of the patient cured of his cold by mouthwash or menthol cigarettes. Surgical scars and the absence of appendices indicate the effect of the surgeon. Neighbors delight in recounting miraculous cures by chiropractic manipulation and if one is willing to listen, he may hear of the effect of rubbing garlic on the chest, and radioactive caves. Even the aunt of the rheumatologist wears a copper bracelet for relief of her arthritis.

Placebo Reactors

Although the existence of the placebo reactor is indicated by centuries of known cures by the physicians, it has only been since the chemist, pharmacologist, and physiologist have been able to identify active structures, sites, and responses, that placebo reactors have become a focus for

*Reprint requests to: Nuhad D. Dinno, M.D., Child Evaluation Center, 334 E. Broadway, Louisville, Ky. 40202

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attention. With attempts to determine clinical efficacies of active drug components or surgical therapeutics, the placebo reactor has become a bothersome nuisance rather than a responsive patient.

The laboratory scientist who determines chemical structure then purifies the physiologically active substance may be subject to sheer frustration when proceeding to a clinical trial. Saline and sugar pills also meet with success, often as much as the active chemical. Warts disappear when coated with nontherapeutic dye.⁶ Pill color and shape, taste of the placebo, and even the prescription filling process affect the reactor response.⁷⁻⁹

Frustrating as cures from sugar pills might be, realization that the placebo reactor also develops adverse reactions, some of frightening intensity, means the clinician still has another parameter with which to deal.^{10,11} How investigators determine which reactions are drug-induced and which are a result of placebo response becomes a difficult task.

In early placebo studies, only therapeutically beneficial effects were considered placebo reactions¹² and yet reactors were still almost 90% of the patients in some studies and more than 35% of over a thousand investigated cases.¹³ In a recent study of birth control placebo, less than 34% of the patients were non-reactors. Various adverse reactions were found to be similar in percentages to those occurring in other studies using active components.¹⁰

To improve the validity of clinical drug trials, attempts have been made to identify the drug reactor. Although numerous character traits were initially ascribed to the placebo reactor,^{12,14} the inconsistency of findings indicates that little is predictable but unpredictability. More illuminating data from these studies indicate that placebo effect is not related to diagnosis or duration of illness. The greater the distress, however, the greater is the degree of placebo response. The degree of anxiety is also found to be positively correlated to placebo reactivity. Another recent finding is that placebo effect is certainly unconscious, persisting even into REM sleep.¹⁵

Unsuccessful in prediction of the reactor, investigators have noted still another inconsistency in clinical trials. Percentages of subjects reacting to placebos vary widely. Investigation of medical personnel attitudes indicates that even though

the dispenser may be unaware which patients are receiving placebos, if he believes in the potency or efficacy of the active component, greater percentages of his placebo patients react.¹⁶ In double blind studies, if the dispenser is able to break the code by identifying side effects of the patients receiving active compounds, he decreases the placebo response, apparently by expecting less from placebo receiving patients.¹⁷

The physicians' presenting attitude is also related to the response evoked in patients.¹⁸ In one study in which patients were told that they were to receive sugar pills but the physician thought the placebo would be beneficial, 13 of 14 patients improved in all investigated parameters.¹⁹ Even the clinical setting affects the response. Vitamins and aspirin received at Mayo Clinic probably have much greater curative effect than those dispensed by the private physician.²⁰

The Physician's Dilemma

Because of documentation indicating the ability of the placebo to evoke measurable autonomic response,⁵ one should recognize its potential therapeutic value. It is found to be as effective as 100 mg of phenobarbital for the treatment of mild insomnia.^{21,22} It has provided relief of angina pectoris, pain, hay fever, headache, cough, peptic ulcer, and essential hypertension.²³ Even advanced malignancies may respond.²⁴ All of these desirable effects have been achieved without exposure of the patient to potentially dangerous active chemicals. Is not the placebo, then, often the "perfect" drug? Why then do most practitioners reject the concept of placebo therapy?

The attitude of the physician toward placebo therapy is governed by practical as well as philosophical considerations. The patient who expects an injection, salve, tonic, pill, or surgery, knows that upon receipt, his symptoms will vanish. The physician is thus faced with the dilemma of patient expectation. If he prescribes nothing he may lose the patient,²⁵ or the patient may lose faith in him. Yet if he prescribes a placebo and the patient receives relief, important symptoms may be masked, making diagnosis of the underlying problem difficult if not impossible.

Other considerations important to the physician include the expense to the patient. If no

drug is indicated, any prescription costs too much. If the patient receives relief though, isn't the cost reasonable?

The physician may also feel that he is deceiving the patient and if discovered will lose the patient's trust.³ He might be more willing to dispense placebos if he were sure there would be no exposure by the nurse, pharmacist, or insurance company.

Still another factor must be peer attitude. Disdain for the placebo effect is the prevalent attitude in medicine today.²³ It is often felt that the placebo dispenser is practicing "one-upmanship," benefitting only when he "outsmarts" the patient.²⁶ Certainly, if one transfers patient records to another physician, he would like to believe that his treatment regimen is respected. What consultant would expect more referrals if he suggested placebo therapy?

Now, however, the physician can no longer put off a decision regarding his feelings toward placebo therapy. Laetrile, a toxic placebo, has recently been legalized in Indiana and several other states and its importation authorized in all states for certain cancer patients by a federal district court.

It is only a matter of time before most physicians will be exposed to a patient's request for laetrile or for the parenteral administration of laetrile which the patient has in his possession. Before this occurs, the physician must know how he will react. Will he attempt to crush the futile hopes of the individual, hoping to bring him to realization of his situation, save him money, and prevent toxic effects, possibly even iatrogenic death? This approach may drive the patient to charlatans willing to administer the compound, undoubtedly at high cost, or at least to other physicians with whom the patient has no rapport. Alternatively, should the physician endorse the placebo to increase its effect while inwardly feeling he is prostituting his scientific knowledge, and knowing that his endorsement will cause others to demand this compound? Should he inform the patient that laetrile is a toxic compound without scientific value, but agree to administer it, or should he avoid a stand altogether, stating that the final answer is not yet in as it applies to humans.

This article makes no attempt to espouse a particular attitude toward placebo, but rather encourages the reader to recognize attainable

placebo effect and explore his feelings toward its use. One must weigh the patient's benefit and risk within the framework of honesty toward himself and his profession and be willing to approach this inevitable confrontation with confidence.

Placebo, Still an Answer

Because of present attitudes regarding administration of placebos, the practitioner is forced to resolve his own position. He must maintain his self esteem while meeting the needs of the patient. For some, the needs of both are met by homeopathic doses of diazepam or chlorthalidone; for others, it may be vitamins or iron.

Within the framework of contemporary thought, if the physician acknowledges placebo effect he should attempt to utilize it effectively to improve the quality of his medicine. Recognizing his particular placebo medicaments as such, he can dispense them with cure-evoking positive attitudes. He should warn of overdosage and adverse reactions, indicating the therapeutic potency, and in lieu of "I am prescribing vitamins" he may state, "This is medicine which I feel will help you," thus utilizing the most time honored placebo effector of all, himself.

*"It is a measure of medicine's maturity that we can return to the precise use of the placebo out of insight rather than ignorance. This powerful and pervasive agent, which was once the mainstay of treatment and then the contaminant of research, may emerge in its own right as a therapeutic specific par excellence."*²⁷

References

1. Forrer G., *Dis. Nerv. Syst.* 25: 655-661, 1964.
2. Shapiro, A.K., in *The Psychological Basis of Medical Practice*, ed. Lief, H., Lief, F., and Lief, N., Harper & Row, N.Y., 163-178, 1968.
3. Bourne, H.R., *Rational Drug Therapy* 5: 11: 1-6, 1971.
4. Shapiro, A.K., *Psychiat. Quart.* 42: 653-695, 1968.
5. Rossi, R., Giberti, F., and Conforto, C., *Comp. Psychiat.* 8: 209-217, 1968.
6. Barber, T.X., *Psychol. Bull.* 58: 390-419, 1961.
7. Brodeur, D., *J. Amer. Pharm. Assoc.* 12: 642-662, 1965.
8. Hussain, M. and Ahad, A., *Brit. Med. J.* 2: 466, 1970.
9. Schapira, K., McClelland, H., Griffiths, N., and Newell, D., *Brit. Med. J.* 2: 446-449, 1970.
10. Aznar-Ramos, R., Giner-Velazquez, J., Lara-Ricalde, R. and Martinez-Manatou, J., *Amer. J. Obs. Gyn.* 105: 1144-1149, 1969.
11. Wolf, S. and Pinsky, R., *JAMA* 155: 339-342, 1954.
12. Shapiro, A., Wilensky, H., and Struening, E., *Comp. Psychiat.* 9: 118-137, 1968.
13. Beecher, H., *JAMA* 159: 1602-1606, 1955.
14. Campbell, J. and Rosenbaum, C., *Arch. Gen. Psychiat.* 16: 364-368, 1967.
15. Zung, W., *Biol. Psychiat.* 6: 89-92, 1973.

(Continued on Page 557)



EDITORIAL

Incentives More Effective Than Cost Cap

DAVID A. JONES

In a continuation of the interest shown in the Hospital Cost Containment Act of 1977, (see October issue, KMA Journal, page 502) the Editorial Board has solicited comments from David A. Jones. Mr. Jones is Chairman of the Board and Chief Executive Officer of Humana Inc.

PRESIDENT Carter has proposed a ceiling of 9% on annual increases in the revenues of hospitals as a means of controlling the high rate of inflation in medical costs. His proposal, which is inappropriate and will be ineffective if enacted, fails to deal directly with the major causes of the problem.

Runaway inflation in health care costs, fueled by the federal government's Medicare and Medicaid programs, is the result primarily of:

- * Cost-plus reimbursement, which encourages hospitals to enlarge staffs and embrace new technologies, products, and services with little regard to cost-effectiveness.
- * Subsidization of Medicare and Medicaid patients by private patients who must pay some costs that should be paid by the government.
- * Unrestrained demand for hospital services by consumers having first-dollar insurance coverage.

In contrast, a proposal by Senator Herman Talmadge, Chairman of the Senate Finance Committee's Health Subcommittee, would deal with some of the major causes. The Talmadge bill would relate a hospital's costs to comparable costs in other hospitals and would provide incentives for cost-effective hospitals.

This proposal also provides for prospective reimbursement on an average-cost basis. Hospitals with lower-than-average costs would share the savings, while those with higher-than-average costs would not be fully reimbursed. Hospitals would then be given an incentive to become more cost-effective.

The Talmadge bill also has a provision that would simplify Medicare and Medicaid claims procedures for participating physicians.

President Carter's cost-control proposal is a cap that does not distinguish between already cost-effective, quality hospitals and inefficient hospitals. By allowing the same percentage increase to each hospital, the high-cost hospitals, which comprise the problem, are given the largest share of new funds.

The President's proposal also does not recognize that certain costs are beyond a hospital's control, such as utilities, malpractice and workmen's compensation insurance, taxes, and employee fringe benefits and these costs are rising faster than 9% a year.

The well-managed hospital will work with its medical staff to eliminate unnecessary costs. Co-operative efforts by hospitals and physicians sometimes can reduce a patient's length of stay. Significant savings also can be achieved through the use of hospital services, including certain surgical procedures, on an outpatient basis.

Senator Talmadge's proposal to give hospitals an incentive for cost-effective performance makes much more sense than an arbitrary cap on revenues.

J S L

AFTER Henry Asman's tragic, unexpected, sudden death, John Llewellyn reluctantly agreed to the Board of Trustees' request to finish Doctor Asman's term as Editor of *The Journal*.

After one year of Doctor Llewellyn's capable leadership *The Journal* regrets that he has stepped down. Avoiding any temptations a man might have to coast for a year he invested a huge time and meticulous care in this work. We feel that *The Journal* has noticeably increased in its dignity and its ability to communicate with attraction to the membership of the Kentucky Medical Association.

Doctor Llewellyn's sincere interest in maintaining and improving the quality of *The Journal* has had an inspiring, salutary effect on the entire editorial board and staff. In this way it is anticipated that his influence will continue to be favorable for many years.

A quality the lack of which too often stumbles otherwise gifted, energetic and dedicated medical leaders, authors and editors is finely turned in John Llewellyn: he is superbly literate. The Kentucky Medical Association is grateful for his lasting contribution to *The Journal*.

AEO

IN APPRECIATION

WHEREAS, John S. Llewellyn, M.D., has unselfishly given of his time to serve on the Editorial Board of The Journal of the Kentucky Medical Association, since his appointment as Assistant Editor in 1974, and

WHEREAS, he assumed the position of Associate Editor in 1976, and

WHEREAS, on the untimely death of Journal Editor, Henry B. Asman, M.D., he agreed to fill the position of Editor and has done so in a diligent manner, and

WHEREAS, many improvements have been wrought in the quality of Journal articles due to his dedicated efforts, and

WHEREAS, in addition to his service on The Journal, he has served KMA as a Trustee from the Fifth District, now therefore be it

RESOLVED, that the Board of Trustees of the Kentucky Medical Association hereby expresses to John S. Llewellyn, M.D., its sincere thanks and deep appreciation for the outstanding service he has performed for The Journal of KMA, and be it further

RESOLVED, that this resolution become an official part of the proceedings of the Board of Trustees meeting in Louisville on September 25, 1977, and that a copy of this resolution be tendered to Doctor Llewellyn at a time and place deemed appropriate by the Board.



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Possibly Effective: Management of vertigo associated with diseases affecting the vestibular system.

Final classification of the less than effective indications requires further investigation.

CONTRAINDICATIONS. Administration of Antivert (meclizine HCl) during pregnancy or to women who may become pregnant is contraindicated in view of the teratogenic effect of the drug in rats.

The administration of meclizine to pregnant rats during the 12-15 day of gestation has produced cleft palate in the offspring. Limited studies using doses of over 100 mg/kg/day in rabbits and 10 mg/kg/day in pigs and monkeys did not show cleft palate. Congeners of meclizine have caused cleft palate in species other than the rat.

Meclizine HCl is contraindicated in individuals who have shown a previous hypersensitivity to it.

WARNINGS. Since drowsiness may, on occasion, occur with use of this drug, patients should be warned of this possibility and cautioned against driving a car or operating dangerous machinery.


Usage in Children: Clinical studies establishing safety and effectiveness in children have not been done; therefore, usage is not recommended in the pediatric age group.

Usage in Pregnancy: See "Contraindications."

ADVERSE REACTIONS. Drowsiness, dry mouth and, on rare occasions, blurred vision have been reported.

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* **Indications:** When the combination represents the dosage determined by titration: Adjunctive therapy in edema associated with congestive heart failure, hepatic cirrhosis, the nephrotic syndrome. Corticosteroid and estrogen-induced edema, idiopathic edema; hypertension, when the potassium sparing action of triamterene is warranted. (See Box Warning.) Routine use of diuretics in healthy pregnant women is inappropriate; they are indicated in pregnancy only when edema is due to pathological causes.

Contraindications: Further use in anuria, progressive renal or hepatic dysfunction, hyperkalemia. Pre-existing elevated serum potassium. Hypersensitivity to either component or other sulfonamide-derived drugs.

Warnings: Do not use potassium supplements, dietary or otherwise, unless hypokalemia develops or dietary intake of potassium is markedly impaired. If supplementary potassium is needed, potassium tablets should not be used. Hyperkalemia can occur, and has been associated with cardiac irregularities. It is more likely in the severely ill, with urine volume less than one liter/day, the elderly and diabetics with suspected or confirmed renal insufficiency. Periodically, serum K⁺ levels should be determined. If hyperkalemia develops, substitute a thiazide alone, restrict K⁺ intake. Associated widened QRS complex or arrhythmia requires prompt additional therapy. Thiazides cross the placental barrier and appear in cord blood. Use in pregnancy requires weighing anticipated benefits against possible hazards, including fetal or neonatal jaundice, thrombocytopenia, other adverse reactions seen in adults. Thiazides appear and triamterene may appear in breast milk. If their use is essential, the patient should stop nursing. Adequate information on use in children is not available.

Precautions: Do periodic serum electrolyte determinations (particularly important in patients vomiting excessively or receiving parenteral fluids).

Periodic BUN and serum creatinine determinations should be made, especially in the elderly, diabetics or those with suspected or confirmed renal insufficiency. Watch for signs of impending coma in severe liver disease. If spironolactone is used concomitantly, determine serum K⁺ frequently; both can cause K⁺ retention and elevated serum K⁺. Two deaths have been reported with such concomitant therapy (in one, recommended dosage was exceeded, in the other serum electrolytes were not properly monitored). Observe regularly for possible blood dyscrasias, liver damage, other idiosyncratic reactions. Blood dyscrasias have been reported in patients receiving triamterene, and leukopenia, thrombocytopenia, agranulocytosis, and aplastic anemia have been reported with thiazides. Triamterene is a weak folic acid antagonist. Do periodic blood studies in cirrhotics with splenomegaly. Antihypertensive effect may be enhanced in post-sympathectomy patients. Use cautiously in surgical patients. The following may occur: transient elevated BUN or creatinine or both, hyperglycemia and glycosuria (diabetic insulin requirements may be altered), hyperuricemia and gout, digitalis intoxication (in hypokalemia), decreasing alkali reserve with possible metabolic acidosis.

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Adverse Reactions:

Muscle cramps, weakness, dizziness, headache, dry mouth; anaphylaxis, rash, urticaria, photosensitivity, purpura, other dermatological conditions;

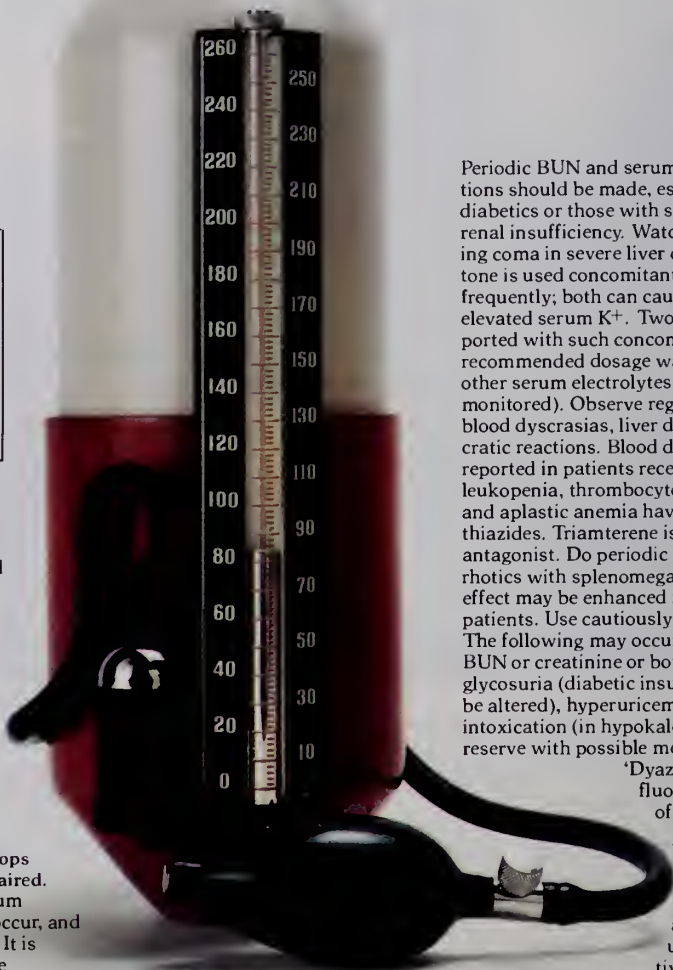
nausea and vomiting, diarrhea, constipation, other gastrointestinal disturbances. Necrotizing vasculitis, paresthesias, icterus, pancreatitis, xanthopsia and, rarely, allergic pneumonitis have occurred with thiazides alone.

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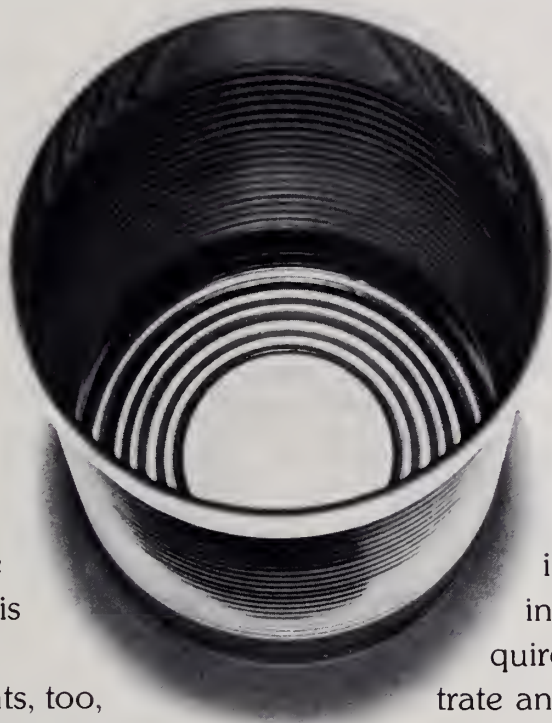
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Usage in Pregnancy. Safe use is not established. Should not be used in pregnant patients unless potential benefits outweigh possible hazards.

PRECAUTIONS: Head injury and increased intracranial pressure. Respiratory depressant effects of narcotics and their capacity to elevate cerebrospinal fluid pressure may be markedly exaggerated in the presence of head injury, other intracranial lesions or a pre-existing increase in intracranial pressure. Narcotics produce adverse reactions which may obscure the clinical course of patients with head injuries.

Acute abdominal condition. These products or other narcotics may obscure the diagnosis or clinical course of acute abdominal conditions.

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ADVERSE REACTIONS: Most frequently include lightheadedness, dizziness, sedation, nausea, and vomiting; more prominent in ambulatory than in nonambulatory patients; some may be alleviated if patient lies down; others include: euphoria, dysphoria, constipation and pruritus.

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ASSOCIATIONAL NEWS

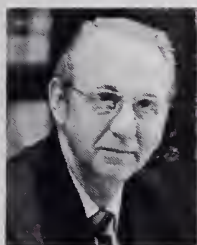


House of Delegates Elects Officers for 1977-78

Officers

Carl Cooper, Jr., M.D., Bedford, was chosen KMA President-Elect for the 1977-78 Associational year by the House of Delegates at its September 28 session. Elected as Vice-President was Robert S. Howell, M.D., Louisville.

The installation of John P. Stewart, M.D., Frankfort, as KMA President took place during the President's Luncheon on September 28. He succeeds Paul J. Parks, M.D., Bowling Green.



Doctor Cooper



Doctor Howell

A family physician, Doctor Cooper has been an active participant in KMA activities for many years. He previously served as Alternate Delegate to the AMA (1962-63), Vice-President (1963-64), Vice-Speaker of the House (1966-74), and most currently was House Speaker (1974-77). A member of numerous committees, to include KMA Legislative Activities, both state and national, he is a former Chairman of the KEMPAC Board of Directors and is a past Vice-President and Director of the Kentucky Academy of Family Physicians.

Doctor Howell, a pathologist at Jewish Hospital in Louisville, is the Immediate Past President of the Jefferson County Medical Society. A 1952 graduate of the University of Louisville School of Medicine, Doctor Howell currently serves on the KMA Committee on Health Care Costs.

Chosen as Speaker and Vice-Speaker of the KMA House of Delegates were, respectively, Bennett L. Crowder, II, M.D., Hopkinsville, and Peter C. Campbell, Jr., M.D., Louisville. Doctor Crowder, a general and thoracic surgeon, had previously served as Vice-Speaker and Parliamentarian. He currently serves on the KMA Emergency Medical Care Committee. An ophthalmologist, Doctor Campbell has served for several years on the KMA Scientific Program Committee.

Re-elected to two-year terms as Delegates to the American Medical Association were David B. Stevens, M.D., Lexington, and Fred C. Rainey, M.D., Elizabeth-

town. Lee C. Hess, M.D., Florence, and Wally O. Montgomery, M.D., Paducah, were also re-elected as Alternate AMA Delegates.

Board of Trustees

James B. Holloway, Jr., M.D., Lexington, and Harold L. Bushey, M.D., Barbourville, were chosen by the Board of Trustees to serve a second term as Chairman and Vice-Chairman, respectively. A former KMA Vice-President and Fayette County Medical Society President, Doctor Holloway represents the Tenth Trustee District. Doctor Bushey, Trustee from the Fifteenth District since 1972, currently serves as Chairman of the Ad Hoc Committee on HSA's.

Newly-elected members of the Board of Trustees are:

Wally O. Montgomery, M.D., Paducah, First District

Harvey A. Page, M.D., Pikeville, Fourteenth District

Re-elected to three-year terms were: Frank R. Pitzer, M.D., Hopkinsville, Third District; Charles B. Spalding, M.D., Bardstown, Fourth District; and William T. Watkins, M.D., Somerset, Twelfth District.

Alternate Trustees elected to the Board were: James E. Adams, M.D., Paducah, First District; Henry R. Bell, M.D., Elkton, Third District; Terrell D. Mays, M.D., Elizabethtown, Fourth District; Don E. Cloys, M.D., Richmond, Eleventh District; Danny M. Clark, M.D., Somerset, Twelfth District; and Jerry D. Fraim, M.D., Paintsville, Fourteenth District.



Newly-elected officers for 1977-78 are: (left to right) Peter C. Campbell, M.D., Louisville, Vice-Speaker; Bennett L. Crowder, II, M.D., Hopkinsville, Speaker of the House; Carl Cooper, M.D., Bedford, President-Elect, and Robert S. Howell, M.D., Louisville, Vice-President.

Dr. Hoyt Gardner Nominated For AMA Presidency

Hoyt D. Gardner, M.D., Louisville, has announced his candidacy for President-Elect of the American Medical Association at next June's convention in St. Louis. Nominated by the KMA Board of Trustees on September 25, Doctor Gardner was recently re-elected to a second term on the AMA Board.

Extremely active in organized medicine at the national, state and county levels, Doctor Gardner is a past president of the Kentucky Medical Association and the Jefferson County Medical Society. He has served on numerous committees of JCMS, KMA and AMA, including a 12-year tenure as Chairman for National Affairs of the KMA Legislative Activities Committee and a member of the AMA Council on Legislation.

A past Chairman of the AMPAC and KEMPAC Board of Directors, Doctor Gardner, a general surgeon, is also a past Chairman of the Board of Trustees of the University of Louisville and the Louisville-Jefferson County Board of Health.

Doctor Gardner said his goal, if elected as AMA President, would be to achieve "total unity in the profession and in the AMA."

Auxiliary Elects New Officers, Changes Convention Dates

Mrs. Tom E. Hall, Bowling Green, was installed as President of the Auxiliary to KMA at its Annual Convention held September 26-28 in Louisville. The Auxiliary chose Mrs. Charles H. Nicholson, Lexington, to serve as President-Elect.

Mrs. Hall succeeds Mrs. R. Parnell Rollings, Louisville, who presided over the three-day convention.

In other action, the Auxiliary voted to change its annual convention to a spring date in a location to be determined by the Auxiliary President. The Auxiliary year would then run from July 1 to June 30 of each year.

Other elected officers of AKMA who will serve until June 30, 1978 are: Mrs. Bennett L. Crowder II, Hopkinsville, 1st Vice-President; Mrs. Paul E. Lett, Ashland, 2nd Vice-President; Mrs. Keith Ellis, Benton, 3rd Vice-President; Mrs. Maurice J. Mueller, Ft. Mitchell, 4th Vice-President; Mrs. Allen Sklar, Lexington, Treasurer; and Mrs. Wm. W. Spalding, Louisville, Recording Secretary.

There are now 29 organized auxiliary chapters in Kentucky with a total membership of over 1400.

Cancer Committee Offers Free Publication

The KMA Cancer Committee has obtained copies of the U.S. Government publication: "Irradiation-Related Thyroid Cancer." The Committee feels this booklet would be of benefit to all physicians and encourages those who have not received a copy to contact the KMA Headquarters Office for a free copy.

Additional information on this subject can be found in the June 1976 issue of *The Journal of KMA* on page 274.



KMA Award recipients for 1977 are congratulated by Fred C. Rainey, M.D., Awards Chairman (center) after the President's Luncheon on September 28. S. Randolph Scheen, M.D., (left) was presented the Distinguished Service Award and Wade Mountz (right) was the Kentucky Medical Association Award recipient.

Dr. S. R. Scheen, Wade Mountz Honored at KMA Luncheon

KMA's highest awards were presented to S. Randolph Scheen, M.D., and Wade Mountz, both of Louisville, during the 1977 KMA Annual Meeting. Fred C. Rainey, M.D., Elizabethtown, Chairman, KMA Awards Committee, made the presentations at the President's Luncheon on September 28.

The Distinguished Service Award recipient, Doctor Scheen, was honored for his "unselfish and dedicated manner" in serving KMA over the past ten years. The youngest physician to ever receive this Award, Doctor Scheen's accomplishments in the field of organized medicine were noted by Doctor Rainey in his presentation. Serving KMA as Secretary from 1967 until his election to the newly created post of Secretary-Treasurer in 1975, Doctor Scheen has been active on an almost daily basis in the business and membership affairs of the Association. He is a member of the Judicial Council and Budget Committee and represents KMA at numerous state and national meetings.

Mr. Mountz, who was presented the Kentucky Medical Association Award, is President of Norton-Children's Hospitals and is a Past President of the Kentucky Hospital Association and the American Protestant Hospital Association, and currently serves as a Regent of the American College of Hospital Administrators. A member of the Board of Trustees of the American Hospital Association for the past five years, he was elected Chairman of the Board in 1975 and Speaker of the House in 1976. He is also a Commissioner on the Joint Commission on Accreditation of Hospitals.

D. Kay Clawson, M.D., Lexington, was recently named by the AMA Board of Trustees to serve on its Residency Review Committee for Orthopedic Surgery. Doctor Clawson is Dean of the University of Kentucky College of Medicine.

Meeting Highlights of the House of Delegates

The complete proceedings of the 1977 KMA House of Delegates will be published in the December issue of

The Journal of KMA.



Doctor Budd

The first session of the House of Delegates on September 26 was highlighted with an address by John H. Budd, M.D., President of the American Medical Association. Doctor Budd stressed that "the individual physician can constitute an influential voice to his patients." He presented several facts about organized medicine which could be useful information for the general public and stated that

the AMA "needs more dues-paying missionaries."

In other action, the 1977 Faculty Scientific Achievement Awards were presented to Thomas B. Calhoon, Ph.D., University of Louisville, and William R. Markesbery, M.D., University of Kentucky.

Listed below are capsule highlights of some of the important issues discussed and acted upon by the Delegates at the final session on September 28, 1977:

—The major discussion centered on the lack of umbrella liability insurance coverage for the state's physicians. The House, noting that legislative attempts to solve the umbrella insurance problems had failed, resolved to handle the problems directly. It recommended that the Board of Trustees proceed with all preliminary steps to organize the Kentucky Medical Insurance Company authorized to provide professional liability umbrella coverage. The Board will seek endorsements and indications of interest in the company from Kentucky physicians and if, by December 1, 1977, sufficient endorsements are received a company will be launched and securities and policies will be offered to the physicians of Kentucky.

In other action, the House:

—Voted to strongly encourage Kentucky's medical schools and Council on Public Higher Education to resist the intrusion of the federal government in its desire to dictate admissions policies at our medical schools.

—Voted to urge the Governor and Council on Public Higher Education to not adopt a single hospital board

plan for the two state medical institutions, but rather support a plan for a board under university control for each institution.

—Recommended continuation of the seminars on Emergency Medical Care, Medical Aspects of Sports, and Joint Practice.

—Requested that KMA pursue all reasonable efforts to amend or delete Radiology Operation Certification regulations through appropriate legislative, administrative, or legal channels.

—Directed the Board of Trustees to prepare new legislation in cooperation with the Kentucky Hospital Association on Confidentiality of Peer Review Proceedings for introduction to the 1978 Kentucky General Assembly.

—Directed the Board to support legislation in the 1978 Kentucky General Assembly to restore the exemption of Physicians' Office Laboratories from KRS 333.

—Strongly urged physician members of local boards of health to attend meetings regularly and voluntarily resign if not able to attend in favor of a physician who can attend.

—Recommended that each county or multi-county society have an active grievance committee to investigate complaints at the local level.

—Changed the Bylaws to give Alternate Delegates to AMA voting privileges on the Board of Trustees.

—Met for five hours at this final session and considered 44 committee and special reports and 22 resolutions.

Delegates Choose Members For 1978 Nominating Committee

Five physicians were elected by the House of Delegates at its final session on September 28 to serve on the 1978 Nominating Committee.

Committee members for 1978 are: Thomas M. Marshall, M.D., Louisville, Chairman; Glenn W. Bryant, M.D., Louisville; Don E. Cloys, M.D., Richmond; Ward O. Griffen, Jr., M.D., Lexington; and L. Martin Wilson, M.D., Bowling Green.

The Committee is responsible for presenting a slate of candidates for all elective offices within the structure of KMA to the House of Delegates at the 1978 Annual Meeting.

COMPARATIVE REGISTRATION FIGURES

KMA Annual Meetings Louisville

| | 1968 | 1969 | 1970 | 1971 | 1972 | 1973 | 1974 | 1975 | 1976 | 1977 |
|-------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| KMA Members | 1011 | 1056 | 1013 | 1186 | 940 | 929 | 918 | 1093 | 1088 | 1048 |
| Guest Physicians | 153 | 149 | 130 | 149 | 142 | 138 | 116 | 152 | 151 | 158 |
| Interns-Residents | 103 | 95 | 101 | 70 | 119 | 103 | 81 | 74 | 78 | 83 |
| Medical Students | 185 | 218 | 245 | 233 | 234 | 234 | 150 | 198 | 237 | 161 |
| Registered Nurses | 42 | 27 | 48 | 30 | 41 | 61 | 38 | 46 | 40 | 54 |
| Exhibitors | 256 | 305 | 280 | 269 | 241 | 240 | 251 | 253 | 298 | 332 |
| Guests | 332 | 339 | 379 | 356 | 364 | 405 | 335 | 405 | 403 | 469 |
| Technicians— | 29 | 39 | 32 | 36 | 34 | 30 | 31 | 37 | 42 | 56 |
| Office Assts. | | | | | | | | | | |
| TOTAL ATTENDANCE | 2111 | 2228 | 2228 | 2329 | 2115 | 2140 | 1920 | 2258 | 2337 | 2361 |

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Actions. Antiminth (pyrantel pamoate) has demonstrated anthelmintic activity against *Enterobius vermicularis* (pinworm) and *Ascaris lumbricoides* (roundworm). The anthelmintic action is probably due to the neuromuscular blocking property of the drug.

Antiminth is partially absorbed after an oral dose. Plasma levels of unchanged drug are low. Peak levels (0.05-0.13 µg/ml) are reached in 1-3 hours. Quantities greater than 50% of administered drug are excreted in feces as the unchanged form, whereas only 7% or less of the dose is found in urine as the unchanged form of the drug and its metabolites.

Indications. For the treatment of ascariasis (roundworm infection) and enterobiasis (pinworm infection).

Warnings. *Usage in Pregnancy:* Reproduction studies have been performed in animals and there was no evidence of propensity for harm to the fetus. The relevance to the human is not known.

There is no experience in pregnant women who have received this drug.

The drug has not been extensively studied in children under two years; therefore, in the treatment of children under the age of two years, the relative benefit/risk should be considered.

Precautions: Minor transient elevations of SGOT have occurred in a small percentage of patients. Therefore, this drug should be used with caution in patients with preexisting liver dysfunction.

Adverse Reactions. The most frequently encountered adverse reactions are related to the gastrointestinal system.

Gastrointestinal and hepatic reactions: anorexia, nausea, vomiting, gastralgia, abdominal cramps, diarrhea and tenesmus, transient elevation of SGOT.

CNS reactions: headache, dizziness, drowsiness, and insomnia. Skin reactions: rashes.

Dosage and Administration. *Children and Adults:* Antiminth Oral Suspension (50 mg of pyrantel base/ml) should be administered in a single dose of 11 mg of pyrantel base per kg of body weight (or 5 mg/lb.); maximum total dose 1 gram. This corresponds to a simplified dosage regimen of 1 ml of Antiminth per 10 lb. of body weight. (One teaspoonful=5 ml.)

Antiminth (pyrantel pamoate) Oral Suspension may be administered without regard to ingestion of food or time of day, and purging is not necessary prior to, during, or after therapy. It may be taken with milk or fruit juices.

How Supplied. Antiminth Oral Suspension is available as a pleasant tasting caramel-flavored suspension which contains the equivalent of 50 mg pyrantel base per ml, supplied in 60 ml bottles and Unitcups™ of 5 ml in packages of 12.

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Before prescribing, please consult complete product information, a summary of which follows:

Indications: Relief of anxiety and tension occurring alone or accompanying various disease states.

Contraindications: Patients with known hypersensitivity to the drug.

Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. As with all CNS-acting drugs, caution patients against hazardous occupations requiring complete mental alertness (e.g., operating machinery, driving). Though physical and psychological dependence have rarely been reported on recommended doses, use caution in administering to addiction-prone individuals or those who might increase dosage; withdrawal symptoms (including convulsions), following discontinuation of the drug and similar to those seen with barbiturates, have been reported.

Usage in Pregnancy: Use of minor tranquilizers during first trimester should almost always be avoided because of increased risk of congenital malformations as suggested in several studies. Consider possibility of pregnancy when instituting therapy; advise patients to discuss therapy if they intend to or do become pregnant.

Precautions: In the elderly and debilitated, and in children over six, limit to smallest effective dosage (initially 10 mg or less per day) to preclude ataxia or oversedation, increasing gradually as needed and tolerated. Not recommended in children under six. Though generally not recommended, if combination therapy with other psycho-

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tropics seems indicated, carefully consider individual pharmacologic effects, particularly in use of potentiating drugs such as MAO inhibitors and phenothiazines. Observe usual precautions in presence of impaired renal or hepatic function. Paradoxical reactions (e.g., excitement, stimulation and acute rage) have been reported in psychiatric patients and hyperactive aggressive children. Employ usual precautions in treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation have been reported very rarely in patients receiving the drug and oral anticoagulants; causal relation-

ship has not been established clinically.

Adverse Reactions: Drowsiness, ataxia and confusion may occur, especially in the elderly and debilitated. These are reversible in most instances by proper dosage adjustment, but are also occasionally observed at the lower dosage ranges. In a few instances syncope has been reported. Also encountered are isolated instances of skin eruptions, edema, minor menstrual irregularities, nausea and constipation, extrapyramidal symptoms, increased and decreased libido—all infrequent and generally controlled with dosage reduction; changes in EEG patterns (low-voltage fast activity) may appear during and after treatment; blood dyscrasias (including agranulocytosis), jaundice and hepatic dysfunction have been reported occasionally, making periodic blood counts and liver function tests advisable during protracted therapy.

Usual Daily Dosage: Individualize for maximum beneficial effects. *Oral—Adults:* Mild and moderate anxiety and tension, 5 or 10 mg *t.i.d.* or *q.i.d.*; severe states, 20 or 25 mg *t.i.d.* or *q.i.d.* *Geriatric patients* 5 mg *b.i.d.* to *q.i.d.* (See Precautions.)

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Please see preceding page for a summary of product information.

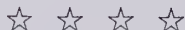


Carl Cooper, M.D., Bedford, makes his way to the podium after the House of Delegates unanimously chose him as KMA President-Elect at their final session on September 28.

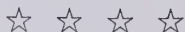


Did you know . . .

The KMA Board of Trustees has appointed 31 committees and four ad hoc committees for the next Associational year. These committees will be reviewing materials and formulating plans for consideration by the Board. A complete list of all committees and their members will be published in the December issue of *The Journal*.



KMA presented formal oral and written testimony at the public hearing on national health insurance in Lexington on October 18. Fred C. Rainey, M.D., Elizabethtown, Chairman of KMA's National Legislative Activities Committee, appeared later that day on the KET Educational Network to discuss the NHI proposal.



KMA Staff continues to monitor activities in Frankfort even though the Interim Committee System has been adjourned. Background material is being researched on all proposed legislation so KMA can be well-prepared to present written and oral comment during the 1978 General Assembly.

A new Medicare list has finally been released—eight months after publication of the original error-ridden list of physicians supposedly receiving substantial Medicare payments in 1975. The new list contains the names of 64 solo practitioners incorrectly listed as receiving more than \$100,000 in Medicare payments. Also listed are 338 physicians representing group rather than individual practices. HEW officials plan to prepare a list which will include all physicians receiving Medicare payments in 1976.



Headquarters Activity

KMA had physicians and staff members in attendance at the following activities and events:

OCTOBER

- 4-6 Officer-Staff Conference, Louisville
- 10 *Journal* Editors', Louisville
- 18 NHI Hearing, Lexington
- 19 Judicial Council, Louisville
- Hospital Committee, Louisville
- 20 Executive Committee, Louisville
- Board of Medical Licensure, Louisville

NOVEMBER

- 10 Scientific Program Committee, Louisville
- 14 *Journal* Editors', Louisville
- 16 Cancer Committee, Louisville
- 17 School Health, Physical Education and Medical Aspects of Sports Committee, Louisville
- 30 Maternal and Child Care, Louisville

DECEMBER

- 4-7 AMA House of Delegates, Interim Meeting, Chicago
- 14 Specialty Group Presidents' Meeting, Louisville
- 14-15 Board of Trustees, Louisville



Three years of the presidency of KMA are represented as (left to right) Paul J. Parks, M.D., Immediate Past President; Carl Cooper, M.D., President-Elect, and John P. Stewart, M.D., President, get together at the close of the 1977 Annual Meeting.

To Avoid Risk, Do Nothing?

This is not easy to do. Through the years we have had some strange claims. One claimant was sleeping, in fact, but when the phone rang he broke his toe. In another case a man's wife accidentally cut his eye with her fingernail while they both were sleeping.

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Each tablet contains 130 mg theophylline, 24 mg ephedrine hydrochloride, and 8 mg phenobarbital.

Each tablet contains 180 mg anhydrous theophylline (90 mg in the immediate release layer and 90 mg in the sustained release layer); 48 mg ephedrine hydrochloride (16 mg in the immediate release layer and 32 mg in the sustained release layer); and 25 mg phenobarbital in the immediate release layer.

Each 5 ml teaspoonful contains 32.5 mg theophylline, 6 mg ephedrine HCl, and 2 mg phenobarbital; the alcohol content is 15%.

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Tedral SA: each tablet contains 180 mg anhydrous theophylline (90 mg in the immediate release layer and 90 mg in the sustained release layer); 48 mg ephedrine hydrochloride (16 mg in the immediate release layer and 32 mg in the sustained release layer); 25 mg phenobarbital in the immediate release layer.

Tedral Elixir: each 5 ml teaspoonful contains 32.5 mg theophylline, 6 mg ephedrine hydrochloride, and 2 mg phenobarbital; the alcohol content is 15%.

Indications. Tedral, Tedral SA, and Tedral Elixir are indicated for the symptomatic relief of bronchial asthma, asthmatic bronchitis, and other bronchospastic disorders. They may also be used prophylactically to abort or minimize asthmatic attacks and are of value in managing occasional, seasonal or perennial asthma.

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Tedral Elixir is convenient for persons who may have difficulty in swallowing tablets.

These Tedral formulations are adjuncts in the total management of the asthmatic patient. Acute or severe asthmatic attacks may necessitate supplemental therapy with other drugs by inhalation or other parenteral routes.

Contraindications. Sensitivity to any of the ingredients; porphyria.

Warnings. Drowsiness may occur. PHENOBARBITAL MAY BE HABIT-FORMING.

Precautions. Use with caution in the presence of cardiovascular disease, severe hypertension, hyperthyroidism, prostatic hypertrophy, or glaucoma.

Adverse Reactions. Mild epigastric distress, palpitation, tremulousness, insomnia, difficulty of micturition, and CNS stimulation have been reported.

Average Dosage. *Prophylactic or Therapeutic.*

Tedral: *Adults*—One or two tablets every 4 hours. *Children*—(Over 60 lb) one-half the adult dose.

Tedral SA: *Adults*—One tablet on arising and one tablet 12 hours later. Tablets should not be chewed. *Children*—Not established for children under 12.

Tedral Elixir: *Note:* One teaspoonful is equivalent to one-quarter Tedral tablet. *Children*—One teaspoonful per 30 lb body weight, every 4-6 hours, unless prescribed otherwise by physician. Should be given to children under 2 years of age only with extreme caution. *Adults*—One to two tablespoonfuls every four hours.

Supplied. Tedral: White, uncoated scored tablets in bottles of 24 (N 0047-0230-24), 100 (N 0047-0230-51) and 1000 (N 0047-0230-60). Also in Unit Dose—package of 10 x 10 strips (N 0047-0230-11).

Tedral SA: Double-layered, uncoated, coral/mottled white tablets in bottles of 100 (N 0047-0231-51) and 1000 (N 0047-0231-60). Also in Unit Dose—package of 10 x 10 strips (N 0047-0231-11).

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Maternal Mortality

(Continued from Page 522)

Comments

The Committee classified this as a direct obstetric death with preventable factors. It was felt that the Methotrexate therapy was not properly given and that she should have been referred to a medical center for such therapy as soon as the diagnosis was made. It was felt that the dosage exceeded that which is currently recommended and that therapy for this complicated situation is indeed complex.

Placebo—Kadlec and Dinno

(Continued from Page 540)

16. Lowinger, P., and Dobie, S., *Arch. Gen. Psychiat.* 20:84, 1969.
17. Rickels, K., Lipman, R., Fisher, S., Park, L. and Uhlenhuth, E., *Psychopharmacologia* (Berl.) 16: 329-336, 1970.
18. Bush, P. J., *J. Amer. Pharm. Assoc.* 14: 671-674, 1974.
19. Park, L., and Covi, L. *Arch. Gen. Psychiat.* 12: 336-345, 1965.
20. Torrey, E. F., *The Mind Game*, Bantam Books, N.Y., 52-63, 1973.
21. Nicolis, F., and Silvestri, L., *Clin. Pharm. and Ther.* 8: 841-848, 1967.
22. Zarolinski, J., Browne, R., and Almassy, A., *J. Clin. Pharm.* 9: 91-98, 1969.
23. Benson, H., and Epstein, M., *JAMA* 232: 1225-1227, 1975.
24. Klopfer, B., *J. Prog. Techn.* 21: 332-340, 1957.
25. Cristol, A., *Penn. Psychiat. Quart.* 3: 32, 1963.
26. Goshen, C.E., *Amer. J. Nurs.* 66: 293-294, 1966.
27. Adler, H., and Hammett, V., *Anal. Intern. Med.*, 78: 595-598, 1973.

Was Your Delegate Present? **ROLL CALL—** 1977 House of Delegates KMA Annual Meeting

OFFICERS

| | | First Session | Second Session |
|----------------------------------|------------------------|------------------|-------------------|
| Speaker | Carl Cooper, Jr. | Present | Present |
| Vice Speaker | Bennett L. Crowder, II | Present | Present |
| President | Paul J. Parks | Present | Present |
| President-Elect | John P. Stewart | Present | Present |
| Vice President | John M. Baird | Present | Present |
| Secretary-Treasurer | S. Randolph Scheen | Present | Present |
| Delegate to AMA | David B. Stevens | Present | Present |
| Delegate to AMA | Fred C. Rainey | Present | Present |
| Delegate to AMA | Harold D. Haller, Sr. | Present | Present |
| Alternate Delegate to the AMA | Lee C. Hess | ..... | ..... |
| Alternate Delegate to the AMA | Wally O. Montgomery | Present | Present |
| Alternate Delegate to the AMA | Kenneth P. Crawford | Present | Present |

TRUSTEES

| District | | | |
|------------|------------------------|---------|---------|
| First | W. Eugene Sloan | Present | Present |
| Second | R. J. Phillips | Present | Present |
| Third | Frank R. Pitzer | Present | Present |
| Fourth | Charles B. Spalding | Present | Present |
| Fifth | Cecil L. Grumbles | Present | Present |
| Sixth | Earl P. Oliver | Present | Present |
| Seventh | William H. Keller | Present | Present |
| Eighth | Richard J. Menke | Present | Present |
| Ninth | Don R. Stephens | ..... | Present |
| Tenth | James B. Holloway, Jr. | Present | Present |
| Eleventh | Dwight L. Blackburn | Present | Present |
| Twelfth | William T. Watkins | ..... | Present |
| Thirteenth | Howard B. McWhorter | ..... | Present |
| Fourteenth | Jerry D. Fraim | Present | ..... |
| Fifteenth | Harold L. Bushey | Present | Present |

ALTERNATE TRUSTEES

| District | | | |
|------------|-----------------------|---------|---------|
| First | Keith E. Ellis | Present | Present |
| Second | Albert H. Joslin | Present | Present |
| Third | Henry R. Bell | Present | Present |
| Fourth | Terrell D. Mays | ..... | Present |
| Fifth | Glenn W. Bryant | Present | Present |
| Sixth | L. Martin Wilson, Jr. | Present | Present |
| Seventh | William H. Powers | ..... | ..... |
| Eighth | Robert C. Smith | ..... | Present |
| Ninth | Kelly G. Moss | ..... | ..... |
| Tenth | Richard F. Hench | Present | Present |
| Eleventh | vacant | | |
| Twelfth | John M. Baird | Present | Present |
| Thirteenth | George R. Bellamy | ..... | ..... |
| Fourteenth | Harvey A. Page | Present | Present |
| Fifteenth | W. H. Stepchuck | Present | Present |

PAST PRESIDENTS

| | | | |
|----------------|-----------------|---------|---------|
| Past President | David A. Hull | ..... | Present |
| Past President | Hoyt D. Gardner | Present | Present |
| Past President | Fred C. Rainey | Present | Present |
| Past President | Lee C. Hess | ..... | ..... |
| Past President | John S. Harter | Present | Present |

DELEGATES

First District

| | | | |
|------------|---------------------|---------|---------|
| BALLARD | R. Gary Marquardt | Present | Present |
| CALLOWAY | | | |
| CARLISLE | | | |
| FULTON | | | |
| GRAVES | C. Douglas LeNeave | Present | Present |
| HICKMAN | C. J. Mills | ..... | ..... |
| LIVINGSTON | Stephen Burkhardt | ..... | ..... |
| McCRACKEN | J. C. Embry | Present | Present |
| | William E. Jackson | Present | Present |
| | Wally O. Montgomery | Present | Present |
| | James L. Shumaker | Present | Present |
| MARSHALL | Keith E. Ellis | Present | Present |

Second District

| | | | |
|-----------|---------------------|---------|---------|
| DAVIESS | James A. Baumgarten | Present | Present |
| | Albert H. Joslin | Present | Present |
| | William E. Pearson | Present | Present |
| | Donald R. Neel | Present | Present |
| HANCOCK | Kenneth Eblen | ..... | Present |
| HENDERSON | John McClellan | Present | Present |
| McLEAN | Hugh H. Wilhite | Present | Present |
| OHIO | R. E. Norsworthy | Present | Present |
| UNION | | | |
| WEBSTER | | | |

Third District

| | | | |
|--------------------------------|-----------------------|---------|---------|
| CRITTENDEN | Wallace R. Alexander | ..... | Present |
| HOPKINS | James G. Gulley | Present | Present |
| PENNYRILE MULTI-COUNTY SOCIETY | N. H. Talley | Present | Present |
| CALDWELL | Carl Caplinger | Present | ..... |
| CHRISTIAN | Delmas Clardy (Alt.) | Present | Present |
| | James H. Simpson | Present | Present |
| | Sam Traughber | Present | Present |
| LYON | W. L. Miller (Alt.) | ..... | Present |
| MUHLBERG | Larry D. Brock | Present | Present |
| TODD | William N. Richardson | Present | Present |
| TRIGG | | | |

Fourth District

| | | | |
|--------------|---------------------|---------|---------|
| BRECKINRIDGE | James G. Sills | Present | ..... |
| | Earl Buchele (Alt.) | ..... | Present |
| BULLITT | W. B. Hamilton | Present | Present |
| GRAYSON | V. F. Duvall | Present | ..... |
| GREEN | Robert P. Simmons | ..... | ..... |
| HARDIN | Marshall Johnson | Present | Present |
| | Wreno Hall (Alt.) | ..... | Present |
| HART | James P. Crews | Present | Present |
| LARUE | M. A. Douglass, Jr. | Present | Present |
| MARION | B. J. Baute | ..... | ..... |
| MEADE | | | |
| NELSON | C. Maxwell Brown | Present | Present |
| TAYLOR | Henry F. Chambers | Present | ..... |
| WASHINGTON | | | |

Fifth District

| | | | |
|-----------|-------------------------|---------|---------|
| JEFFERSON | William Steve Aaron | Present | Present |
| | Hugh P. Adkins | Present | Present |
| | Robert E. Arnold | ..... | Present |
| | Joseph C. Babey | ..... | Present |
| | David Bizot | Present | Present |
| | Harold Blevins | ..... | Present |
| | Charles Brohm | Present | Present |
| | Glenn Bryant | Present | Present |
| | John Bunting | Present | Present |
| | William C. | | |
| | Buschemeyer, Jr. | Present | Present |
| | Peter C. Campbell | Present | Present |
| | E. Dean Canan | ..... | Present |
| | Clinton C. Cook, III | Present | Present |
| | James Curry | ..... | Present |
| | Donne DeMunbrun | Present | Present |
| | Bob DeWeese | Present | Present |
| | Paul Fleitz (Alt.) | ..... | Present |
| | Michael Flynn | Present | Present |
| | Henry Garretson | ..... | Present |
| | Laman A. Gray, Jr. | Present | Present |
| | John Guarnaschelli | ..... | Present |
| | Claude Hazlett (Alt.) | ..... | Present |
| | Terry Henkel | Present | Present |
| | Robert S. Howell | ..... | Present |
| | Richard Jelsma | ..... | Present |
| | Arthur H. Keeney (Alt.) | Present | Present |
| | Ferrell Lowrey | Present | Present |
| | Joseph C. Marshall | ..... | Present |
| | Thomas M. Marshall | Present | Present |
| | James Moss | Present | ..... |
| | C. Ray Potts | Present | Present |
| | B. Frank Radmacher | Present | Present |
| | Bernard Rand | Present | Present |
| | David Shipp | Present | Present |
| | Charles C. Smith, Jr. | Present | Present |
| | Thomas Stigall | Present | Present |
| | T. Bodley Stites | Present | Present |
| | Gerald Temes | Present | Present |
| | Lucy S. Tyler | ..... | Present |
| | Donald Varga | ..... | Present |
| | Sam D. Weakley | Present | Present |
| | A. F. White (Alt.) | ..... | Present |
| | Walter Wilson | Present | Present |
| | Marvin Yussman (Alt.) | Present | |

Sixth District

| | | | |
|------------|--------------------|---------|---------|
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| ALLEN | Earl P. Oliver | Present | Present |
| BARREN | Howard L. Edgin | Present | Present |
| BUTLER | Richard T. C. Wan | ..... | Present |
| CUMBERLAND | Joseph Schickel | ..... | Present |
| EDMONSON | | | |
| LOGAN | Lewis E. Martin | Present | Present |
| METCALFE | L. P. Emberton | ..... | ..... |
| MONROE | James E. Carter | ..... | ..... |
| SIMPSON | J. Michael Pulliam | Present | Present |
| WARREN | John P. Blackburn | Present | Present |
| | John E. Downing | Present | Present |
| | L. Martin Wilson | Present | Present |

Seventh District

| | | | |
|----------|---------------------|---------|---------|
| ANDERSON | H. Boyd Caudill | ..... | ..... |
| CARROLL | Cecil D. Martin | Present | Present |
| FRANKLIN | Branham B. Baughman | ..... | Present |
| | M. O. Patrick | ..... | ..... |
| GALLATIN | | | |
| GRANT | L. M. Quill | Present | Present |
| HENRY | Wyatt Norvell | Present | Present |
| OLDHAM | Robert G. Wellman | Present | Present |
| OWEN | O. A. Cull | ..... | ..... |
| SHELBY | Alan Honaker | Present | Present |
| SPENCER | William K. Skaggs | ..... | ..... |
| TRIMBLE | Carl Cooper, Jr. | Present | Present |

Eighth District

| | | | |
|-----------|------------------------|---------|---------|
| BOONE | William M. Waller | Present | Present |
| CAMPBELL- | Carl J. Brueggemann | Present | Present |
| KENTON | Frank Garamy | Present | Present |
| | Thomas L. Heavern, Jr. | Present | Present |
| | Howard Heringer | Present | Present |
| | Paul H. Klingenberg | Present | Present |
| | William B. Monnig | Present | Present |
| | Fred A. Stine | Present | Present |
| | Robert E. Smith | Present | Present |
| | Raymond J. Timmerman | Present | Present |

Ninth District

| | | | |
|-----------|-----------------------|---------|---------|
| BATH | Harry Galloway (Alt.) | Present | Present |
| BOURBON | James M. Stevenson | Present | Present |
| BRACKEN | Robert W. Fidler | Present | Present |
| FLEMING | Joe A. Nichols | ..... | ..... |
| HARRISON | Joseph McKinney | ..... | ..... |
| MASON | W. R. Kingsolver | ..... | ..... |
| NICHOLAS | Robert L. McKenney | Present | Present |
| PENDLETON | | | |
| ROBERTSON | | | |
| SCOTT | Gus A. Bynum | Present | Present |

Tenth District

| | | | |
|-----------|-------------------------|---------|---------|
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| | Leslie W. Blakey | Present | Present |
| | Peter Bosomworth | Present | |
| | Walter R. Brewer | Present | Present |
| | Thomson R. Bryant, Jr. | Present | Present |
| | P. Raphael Caffrey | Present | Present |
| | Max A. Crocker | Present | Present |
| | Melvin L. Dean | Present | Present |
| | Marcus L. Dillon, Jr. | Present | Present |
| | Glenn U. Dorroh | Present | Present |
| | Ward O. Griffen, Jr. | ..... | Present |
| | Allen E. Grimes, Jr. | Present | Present |
| | Walter D. Harris | Present | Present |
| | Van R. Jenkins | Present | Present |
| | C. Nicholas Kavanaugh | Present | Present |
| | H. Brooks Morgan (Alt.) | ..... | Present |
| | Edwin J. Nighbert | ..... | Present |
| | John E. Trevey | Present | Present |
| JESSAMINE | Phyllis J. Corbitt | ..... | Present |
| WOODFORD | Lewis E. Wash | Present | Present |

Eleventh District

| | | | |
|------------|-------------------|---------|---------|
| CLARK | Philip R. Curd | | |
| ESTILL | Arnold R. Taulbee | | |
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| LEE | Linda S. Fagan | Present | Present |
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| OWSLEY | M. B. Gabbard | | |
| POWELL | | | |
| WOLFE | Paul F. Maddox | | Present |



An audience of over 300 was on hand to hear Grady Nutt give his humorous, but thought-provoking, presentation at the President's Luncheon, September 28.

Twelfth District

| | | | |
|------------|----------------------|---------|---------|
| BOYLE | Elmer H. Jackson | Present | Present |
| | David C. Liebschutz | Present | Present |
| CASEY | Lewis E. Wesley | Present | ..... |
| CLINTON | Floyd B. Hay | Present | Present |
| GARRARD | Paul J. Sides (Alt.) | ..... | Present |
| LINCOLN | Charles E. Crase | ..... | Present |
| MCCREARY | | | |
| MERCER | Bacon R. Moore | Present | Present |
| PULASKI | J. Roy Biggs | Present | Present |
| | Danny M. Clark | Present | Present |
| ROCKCASTLE | G. W. Griffith | ..... | ..... |
| RUSSELL | James E. Monin | ..... | ..... |
| WAYNE | Robert B. Breeding | Present | Present |

Thirteenth District

| | | | |
|----------|---------------------|---------|---------|
| BOYD | W. L. Cawood (Alt.) | Present | Present |
| | Wiley E. Kozee | Present | Present |
| | Paul E. Lett (Alt.) | Present | Present |
| CARTER | | | |
| ELLIOTT | | | |
| GREENUP | | | |
| LAWRENCE | | | |
| LEWIS | | | |
| MORGAN | James D. Frederick | ..... | ..... |
| ROWAN | Charles D. Franks | Present | Present |
| | Jack L. Kiesel | ..... | ..... |

Fourteenth District

| | | | |
|-----------|-----------------------|---------|---------|
| BREATHITT | E. C. Turner | ..... | ..... |
| FLOYD | W. Grady Stumbo | Present | Present |
| JOHNSON | Joseph H. Rapier, Jr. | Present | Present |
| KNOTT | Gene T. Watts | ..... | Present |
| LETCHER | Robert H. Cullen | Present | Present |
| MAGOFFIN | Henry B. Ross | ..... | ..... |
| MARTIN | Raymond D. Wells | ..... | ..... |
| PERRY | Keith W. Cameron | ..... | ..... |
| PIKE | Ballard Cassidy | Present | ..... |
| | Terry L. Wright | Present | ..... |

Fifteenth District

| | | | |
|---------|-------------------------|---------|---------|
| BELL | J. B. LeSage | Present | Present |
| | Emanuel H. Rader | Present | Present |
| CLAY | W. E. Becknell | Present | ..... |
| HARLAN | Milo H. Schosser (Alt.) | Present | Present |
| | Paul M. Walstad | Present | Present |
| KNOX | Rufino Crisostomo, Jr. | Present | Present |
| LAUREL | William D. Pratt | Present | Present |
| LESLIE | W. B. Rogers Beasley | Present | Present |
| WHITLEY | Donald C. Barton | Present | Present |
| | R. D. Pitman | Present | |

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For recurrent attacks of urinary tract infection in women

Bactrim™ DS Double Strength Tablets



Each tablet contains 160 mg trimethoprim and 800 mg sulfamethoxazole.

Just one tablet b.i.d. for 10 to 14 days

- Action at urinary/vaginal/lower bowel sites helps eliminate reservoirs of infecting organisms
- Distinctive antibacterial action plus wide spectrum helps eradicate recurrent UTI
- Low incidence of bacterial resistance in community practice

- Convenient *b.i.d.* dosage provides day-and-night antibacterial control
- Contraindicated during pregnancy and the nursing period. During therapy, maintain adequate fluid intake; perform CBC's and urinalyses with microscopic examination.

Before prescribing, please consult complete product information, a summary of which follows:

Indications and Usage: For the treatment of urinary tract infections due to susceptible strains of the following organisms: *Escherichia coli*, *Klebsiella-Enterobacter*, *Proteus mirabilis*, *Proteus vulgaris*, *Proteus morganii*. It is recommended that initial episodes of uncomplicated urinary tract infections be treated with a single effective antibacterial agent rather than the combination. **Note:** The increasing frequency of resistant organisms limits the usefulness of all antibacterials, especially in these urinary tract infections.

Also for the treatment of documented *Pneumocystis carinii* pneumonitis. To date, this drug has been tested only in patients 9 months to 16 years of age who were immunosuppressed by cancer therapy.

The recommended quantitative disc susceptibility method (Federal Register, 37:20527-20529, 1972) may be used to estimate bacterial susceptibility to Bactrim. A laboratory report of "Susceptible to trimethoprim-sulfamethoxazole" indicates an infection likely to respond to Bactrim therapy. If infection is confined to the urine, "Intermediate susceptibility" also indicates a likely response. "Resistant" indicates that response is unlikely.

Contraindications: Hypersensitivity to trimethoprim or sulfonamides; pregnancy; nursing mothers; infants less than two months of age.

Warnings: Deaths from hypersensitivity reactions, agranulocytosis, aplastic anemia and other blood dyscrasias have been associated with sulfonamides. Experience with trimethoprim is much more limited but occasional interference with hematopoiesis has been reported as well as an increased incidence of thrombopenia with purpura in elderly patients on certain diuretics, primarily thiazides. Sore throat, fever, pallor, purpura or jaundice may be early signs of serious blood disorders. Frequent CBC's are recommended; therapy should be discontinued if a significantly reduced count of any formed blood element is noted.

Precautions: Use cautiously in patients with impaired renal or hepatic function, possible folate deficiency, severe allergy or bronchial asthma. In patients with glucose-6-phosphate dehydrogenase deficiency, hemolysis, frequently dose-related, may occur. During therapy, maintain adequate fluid intake and perform frequent urinalyses, with careful microscopic examination, and renal function tests, particularly where there is impaired renal function.

Adverse Reactions: All major reactions to sulfonamides and trimethoprim are included, even if not reported with Bactrim. **Blood dyscrasias:** Agranulocytosis, aplastic anemia, megaloblastic anemia, thrombopenia, leukopenia, hemolytic anemia, purpura, hypoprothrombinemia and methemoglobinemia. **Allergic reactions:** Erythema multiforme, Stevens-Johnson syndrome, generalized skin eruptions, epidermal necrolysis, urticaria, serum sickness, pruritus, exfoliative dermatitis, anaphylactoid reactions, periorbital edema, conjunctival and scleral injection, photosensitization, arthralgia and allergic myocarditis. **Gastrointestinal reactions:** Glossitis, stomatitis, nausea, emesis, abdominal pains, hepatitis, diarrhea and pancreatitis. **CNS reactions:** Headache,

peripheral neuritis, mental depression, convulsions, ataxia, hallucinations, tinnitus, vertigo, insomnia, apathy, fatigue, muscle weakness and nervousness. **Miscellaneous reactions:** Drug fever, chills, toxic nephrosis with oliguria and anuria, periarteritis nodosa and L. E. phenomenon. Due to certain chemical similarities to some goitrogens, diuretics (acetazolamide, thiazides) and oral hypoglycemic agents, sulfonamides have caused rare instances of goiter production, diuresis and hypoglycemia in patients; cross-sensitivity with these agents may exist. In rats, long-term therapy with sulfonamides has produced thyroid malignancies.

Dosage: Not recommended for infants less than two months of age.

Urinary Tract Infections: Usual adult dosage—1 DS tablet (double strength), 2 tablets (single strength) or 4 teasp. (20 ml) b.i.d. for 10-14 days.

Recommended dosage for children—8 mg/kg trimethoprim and 40 mg/kg sulfamethoxazole per 24 hours, in two divided doses for 10 days. A guide follows:

Children two months of age or older

| Weight | | Dose—every 12 hours | |
|--------|-----|---------------------|--------------------------|
| lbs | kgs | Teaspoonfuls | Tablets |
| 20 | 9 | 1 teasp. (5 ml) | ½ tablet |
| 40 | 18 | 2 teasp. (10 ml) | 1 tablet |
| 60 | 27 | 3 teasp. (15 ml) | 1½ tablets |
| 80 | 36 | 4 teasp. (20 ml) | 2 tablets or 1 DS tablet |

For patients with renal impairment:

| Creatinine Clearance (ml/min) | Recommended Dosage Regimen |
|-------------------------------|----------------------------|
| Above 30 | Usual standard regimen |
| 15-30 | ½ the usual regimen |
| Below 15 | Use not recommended |

***Pneumocystis carinii* pneumonitis:** Recommended dosage: 20 mg/kg trimethoprim and 100 mg/kg sulfamethoxazole per 24 hours in equal doses every 6 hours for 14 days. See complete product information for suggested children's dosage table.

Supplied: *Double Strength (DS) tablets*, each containing 160 mg trimethoprim and 800 mg sulfamethoxazole, bottles of 100; Tel-E-Dose® packages of 100. *Tablets*, each containing 80 mg trimethoprim and 400 mg sulfamethoxazole—bottles of 100 and 500; Tel-E-Dose® packages of 100; Prescription Paks of 40, available singly and in trays of 10. *Oral suspension*, containing in each teaspoonful (5 ml) the equivalent of 40 mg trimethoprim and 200 mg sulfamethoxazole, fruit-licorice flavored—bottles of 16 oz (1 pint).



Roche Laboratories
Division of Hoffmann-La Roche Inc.
Nutley, New Jersey 07110

Please see back cover.

Her next attack of cystitis may require

the BactrimTM 3-system counterattack



ROCHE

Bactrim has shown high clinical effectiveness in recurrent cystitis as a result of its wide spectrum and distinctive antimicrobial action in the urinary, vaginal and lower intestinal tracts.

The probability of recurrent urinary tract infection appears to be enhanced by the establishment of large numbers of *E. coli* or other urinary pathogens on the vaginal introitus. The trimethoprim component of

Bactrim diffuses into vaginal fluid in effective concentrations, thus combating migration of pathogens into the urethra.

Studies have shown that Bactrim acts against *Enterobacteriaceae* in the bowel without the emergence of resistant organisms. Thus, Bactrim reduces the risk of introital colonization by fecal uropathogens. It has no significant effect on other normal, necessary intestinal flora.

Bactrim fights uropathogens in the urinary tract/vaginal tract/lower intestinal tract

Please see reverse side for summary of product information.

December 1977
Volume 75
Number 12

Important Reference Issue for 1977:
House Proceedings, 77-78 Committees
Constitution & Bylaws, Journal Index

ND5

The Journal Of The Kentucky Medical Association

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A character all its own.



Valium (diazepam) is a benzodiazepine with a character all its own.

Pharmacologically, it has been described as more potent mg-per-mg than other available anxiolytic benzodiazepines. Pharmacokinetically, only Valium provides active *diazepam* as well as the active metabolites 3-hydroxydiazepam, desmethyldiazepam and oxazepam.

But the individual character of Valium is even more apparent clinically than pharmacokinetically. And far more significant. That's because of the patient response obtained with Valium. A response which brings a calmer frame of mind. A response which has a pronounced effect on the somatic symptoms of anxiety, particularly muscular tension. A response which helps the patient feel more like himself again because of the way Valium reduces the overwhelming symptoms of anxiety and psychic tension.

Another important aspect of the clinical character of Valium is safety. Though drowsiness, ataxia and fatigue are possible, these and more serious side effects are rarely a problem. Of course, as with all CNS-acting drugs, patients taking Valium should be cautioned against driving, operating dangerous machinery or the simultaneous ingestion of alcohol.

Unquestionably, many psychotherapeutic agents, including other benzodiazepines, have antianxiety effects. But one fact remains: you get a certain kind of patient response with Valium. It's a response you want. A response you know. A response you trust as part of your overall management of anxiety and psychic tension.

Valium[®] (diazepam)^{IV}

2-mg, 5-mg, 10-mg scored tablets
a prudent choice in psychic
tension and anxiety

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Tension and anxiety states; somatic complaints which are concomitants of emotional factors; psychoneurotic states manifested by tension, anxiety, apprehension, fatigue, depressive symptoms or agitation; symptomatic relief of acute agitation, tremor, delirium tremens and hallucinosis due to acute alcohol withdrawal; adjunctively in skeletal muscle spasm due to reflex spasm to local pathology; spasticity caused by upper motor neuron disorders; athetosis; stiff-man syndrome; convulsive disorders (not for sole therapy).

Contraindicated: Known hypersensitivity to the drug. Children under 6 months of age. Acute narrow angle glaucoma; may be used in patients with open angle glaucoma who are receiving appropriate therapy.

Warnings: Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anticonvulsant medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms (similar to those with barbiturates and alcohol) have occurred following abrupt discontinuance (convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). Keep addiction-prone individuals under careful surveillance because of their predisposition to habituation and dependence.

Usage in Pregnancy: Use of minor tranquilizers during first trimester should almost always be avoided because of increased risk of congenital malformations as suggested in several studies. Consider possibility of pregnancy when instituting therapy; advise patients to discuss therapy if they intend to or do become pregnant.

Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed; drugs such as phenothiazines, narcotics, barbiturates, MAO inhibitors and other antidepressants may potentiate its action. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.

Side Effects: Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.



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MESSAGE FROM THE PRESIDENT



Economic Debauchery

We, the people, who have the power of the vote, are sitting on the sidelines witnessing and allowing economic euthanasia.

Inflation is undermining the strength of our nation. What are the causes of this inflation? There are two major causes—deficit spending by Congress and excessive growth of dollars by the Federal Reserve.

Our forefathers recognized the fundamental importance of fiscal responsibility and placed it in the hands of Congress. The record of Federal deficits since the early 1960s is: 1963-66, 16 billion; 1967-68, 34 billion; 1970-73, 63 billion; from 1974-78, an estimated 240 billion.

The Federal Reserve holds the power to create new dollars. From 1946 until 1966 the growth of money was 2.6%, the inflation rate 2.6%; from 1967-1976 the growth of money 6.0%, the inflation rate, 6.0%. Mr. Burns talks tough, but “political necessity” forces the Federal Reserve to create excessive dollars to finance the Federal deficits. With ever-increasing deficits, more and more dollars will have to be created. Inflation follows with more and more erosion of purchasing power—then to more unemployment as people do not have the purchasing power to support growth—ultimately economic collapse—capitalistic euthanasia.

The tragic irony of such fiscal and monetary irresponsibility is the people these policies were to help, the poor and the aged who can least afford recession or higher prices, are the very ones suffering the most—a cruel disgrace. No wonder there is widespread contempt for our politicians who dream up all these spending proposals to “help the little people.”

Even Franklin Roosevelt said: “Let us have the courage to stop borrowing to meet continuing deficits. Revenues must cover expenditures by one means or another.” Eisenhower was our last president who believed in a sound dollar. Mr. Carter promised a balanced budget, but is now backing away from that promise. Lenin declared, “the easiest way to destroy the capitalist system is to debauch the currency. By a continuing process of inflation, governments can confiscate, secretly and unobserved, an important part of the wealth of their citizens.”

The future of American medicine and of our individual rights stands on economic soundness. How can any leader in their right mind advocate replacement of an effective private medical system with a National Health Insurance Plan costing even at the beginning well over 100 billion additional Federal dollars?

JOHN P. STEWART, M.D., President
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A Link in the Chain

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The Auxiliary to KMA is vitally interested in the future of medicine in this country and the betterment of medical education. Our joint efforts—as physicians and spouses—in the American Medical Association Education and Research Foundation program helps to eliminate the financial barrier to medicine for all who are qualified and accepted by an approved training institution. This Loan Program for medical students, interns, and residents is the result of a cooperative effort by American medicine and private enterprise.

This Auxiliary page is a Christmas greeting from those who have contributed this year to our Sharing Card for AMA-ERF. This list does not include additional contributions received after November 22.

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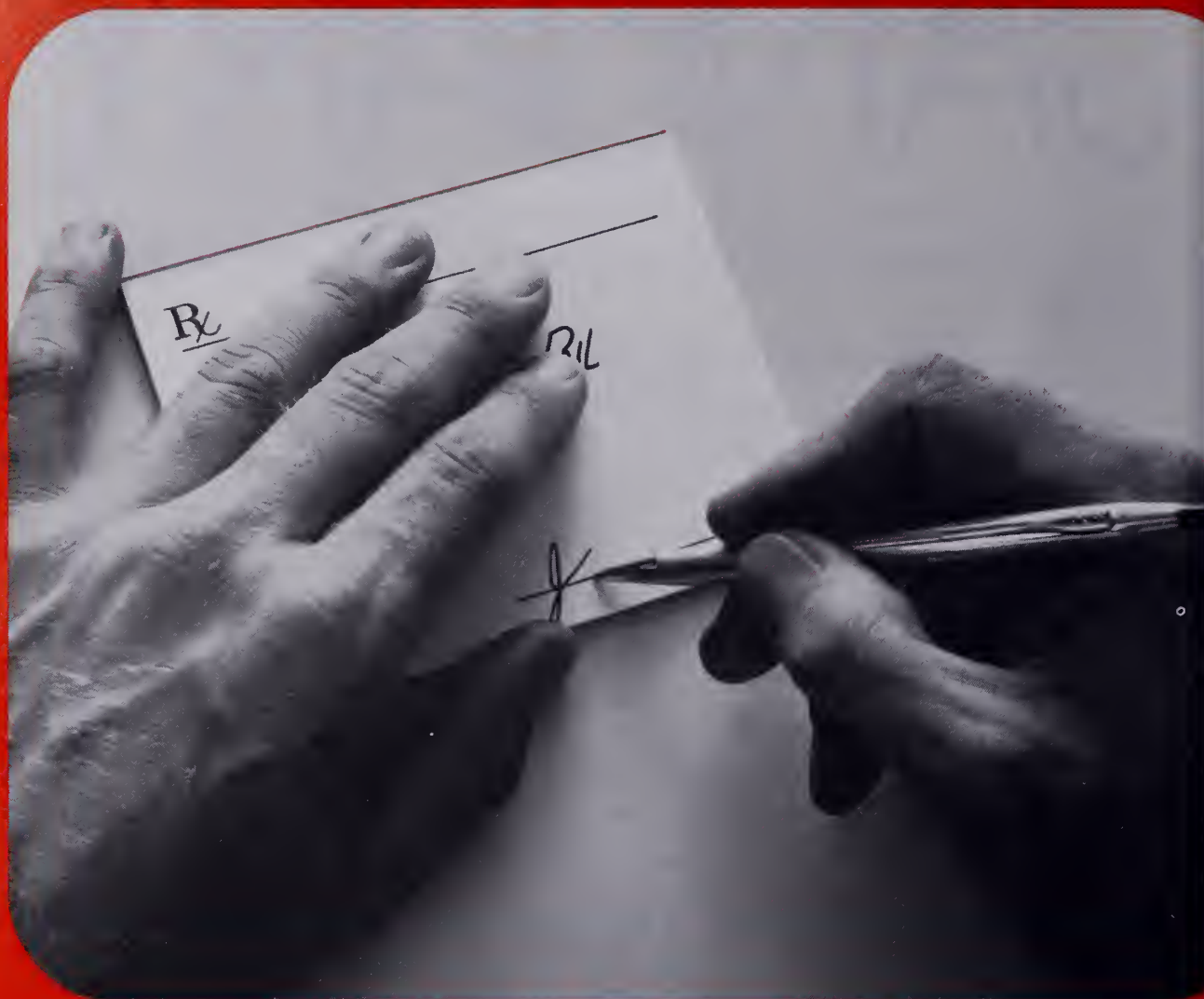
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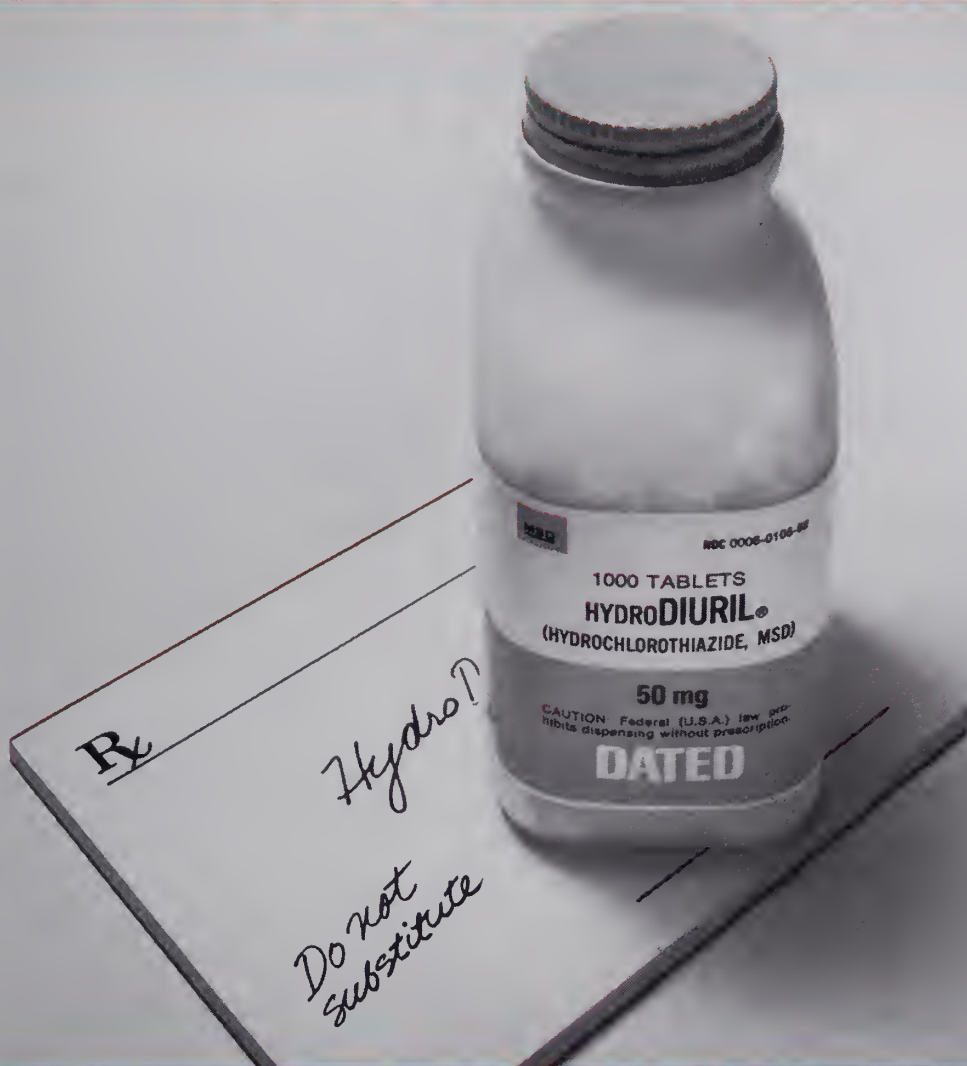
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Warnings: Use with caution in severe renal disease. In patients with renal disease, thiazides may precipitate azotemia. Cumulative effects may develop in patients with impaired renal function. Use with caution in patients with impaired hepatic function or progressive liver disease, since minor alterations of fluid and electrolyte balance may precipitate hepatic coma. May add to or potentiate action of other antihypertensive drugs; potentiation occurs with ganglionic or peripheral adrenergic blocking drugs. Sensitivity reactions may occur in patients with or without a history of allergy or bronchial asthma. Possibility of exacerbation or activation of systemic lupus erythematosus has been reported. Lithium generally should not be given with diuretics because they reduce its renal clearance and add a high risk of lithium toxicity. Read circulars for lithium preparations before use of such concomitant therapy. *Use in Pregnancy:* Thiazides cross placental barrier and appear in cord blood; in pregnancy, weigh anticipated benefit against possible hazards to fetus, including fetal or neonatal jaundice, thrombocytopenia, and possibly other adverse reactions that have occurred in adults. *Nursing Mothers:* Thiazides appear in breast milk; if use of drug is deemed essential, patient should stop nursing.

Precautions: Perform periodic determination of serum electrolytes to detect possible electrolyte imbalance. Observe all patients for clinical signs of fluid or electrolyte imbalance, namely, hyponatremia, hypochloremic alkalosis, and hypokalemia. Serum and urine electrolyte determinations are particularly important when patient is vomiting ex-

cessively or receiving parenteral fluids. Medication such as digitalis may also influence serum electrolytes. Warning signs, irrespective of cause, are dryness of mouth, thirst, weakness, lethargy, drowsiness, restlessness, muscle pains or cramps, muscular fatigue, hypotension, oliguria, tachycardia, and gastrointestinal disturbances such as nausea and vomiting. Hypokalemia may develop, especially with brisk diuresis in severe cirrhosis, with concomitant corticosteroid or ACTH therapy, with inadequate oral electrolyte intake. Hypokalemia can sensitize and exaggerate response of heart to toxic effects of digitalis (e.g., increased ventricular irritability). Hypokalemia may be avoided or treated by use of potassium supplements, such as foods with a high potassium content. Any chloride deficit is generally mild and usually does not require specific treatment except under extraordinary circumstances (as in severe liver disease or renal disease). Dilutional hyponatremia may occur in edematous patients in hot weather; appropriate therapy is water restriction, rather than administration of salt except in rare instances when the hyponatremia is life threatening. In actual salt depletion, appropriate replacement is the therapy of choice. Hyperuricemia may occur or frank gout may be precipitated in certain patients. Insulin requirements in diabetic patients may be increased, decreased, or unchanged; latent diabetes mellitus may become manifest. Thiazides may increase responsiveness to tubocurarine. Antihypertensive effects of the drug may be enhanced in post-sympathectomy patients. May decrease arterial responsiveness to norepinephrine; this diminution is not sufficient to preclude effectiveness of the pressor agent for therapeutic use. If progressive renal

or experience—



or ours.

nt becomes evident, consider withholding or discontinuing therapy. Thiazides may decrease serum PBI levels without thyroid disturbance. Calcium excretion is decreased by es. Pathologic changes in the parathyroid gland with hypernia and hypophosphatemia have been observed in a few patients on long therapy; thiazides should be discontinued before testing thyroid function.

Reactions: *Gastrointestinal System*—Anorexia; gastric irritation; nausea; vomiting; cramping; diarrhea; constipation; jaundice (hepatic cholestatic jaundice); pancreatitis; sialadenitis.

Nervous System—Dizziness; vertigo; paresthesias; headache; psia.

Hematologic—Leukopenia; agranulocytosis; thrombocytopenia; anemia.

Vascular—Orthostatic hypotension (may be aggravated by alcohol, barbiturates, or narcotics).

Sensitivity—Purpura; photosensitivity; rash; urticaria; necrotizing (vasculitis) (cutaneous vasculitis); fever; respiratory distress; pneumonia; anaphylactic reactions.

—Hyperglycemia; glycosuria; hyperuricemia; muscle spasm; lass; restlessness; transient blurred vision.

Over adverse reactions are moderate or severe, thiazide dosage should be reduced or therapy withdrawn.

When used with other antihypertensive drugs, careful observation for changes in blood pressure must be made, especially during therapy. Dosage of other antihypertensive agents must be

reduced by at least 50 percent as soon as this drug is added to the regimen. As blood pressure falls under the potentiating effect of this agent, further reduction in dosage, or even discontinuation, of other antihypertensive drugs may be necessary.

How Supplied: Tablets containing 25 mg hydrochlorothiazide each in bottles of 100 and 1000 and single-unit packages of 100; Tablets containing 50 mg hydrochlorothiazide each in bottles of 100, 1000, and 5000 and single-unit packages of 100; Tablets containing 100 mg hydrochlorothiazide each in bottles of 100.

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- Low incidence of bacterial resistance in community practice

- Convenient b.i.d. dosage provides day-and-night antibacterial control
- Contraindicated during pregnancy and the nursing period. During therapy, maintain adequate fluid intake; perform CBC's and urinalyses with microscopic examination.

Before prescribing, please consult complete product information, a summary of which follows:

Indications and Usage: For the treatment of urinary tract infections due to susceptible strains of the following organisms: *Escherichia coli*, *Klebsiella-Enterobacter*, *Proteus mirabilis*, *Proteus vulgaris*, *Proteus morganii*. **It is recommended that initial episodes of uncomplicated urinary tract infections be treated with a single effective antibacterial agent rather than the combination.** Note: The increasing frequency of resistant organisms limits the usefulness of all antibacterials, especially in these urinary tract infections.

Also for the treatment of documented *Pneumocystis carinii* pneumonia. To date, this drug has been tested only in patients 9 months to 16 years of age who were immunosuppressed by cancer therapy.

The recommended quantitative disc susceptibility method (*Federal Register*, 37:20527-20529, 1972) may be used to estimate bacterial susceptibility to Bactrim. A laboratory report of "Susceptible to trimethoprim-sulfamethoxazole" indicates an infection likely to respond to Bactrim therapy. If infection is confined to the urine, "Intermediate susceptibility" also indicates a likely response. "Resistant" indicates that response is unlikely.

Contraindications: Hypersensitivity to trimethoprim or sulfonamides; pregnancy; nursing mothers; infants less than two months of age.

Warnings: Deaths from hypersensitivity reactions, agranulocytosis, aplastic anemia and other blood dyscrasias have been associated with sulfonamides. Experience with trimethoprim is much more limited but occasional interference with hematopoiesis has been reported as well as an increased incidence of thrombopenia with purpura in elderly patients on certain diuretics, primarily thiazides. Sore throat, fever, pallor, purpura or jaundice may be early signs of serious blood disorders. Frequent CBC's are recommended; therapy should be discontinued if a significantly reduced count of any formed blood element is noted.

Precautions: Use cautiously in patients with impaired renal or hepatic function, possible folate deficiency, severe allergy or bronchial asthma. In patients with glucose-6-phosphate dehydrogenase deficiency, hemolysis, frequently dose-related, may occur. During therapy, maintain adequate fluid intake and perform frequent urinalyses, with careful microscopic examination, and renal function tests, particularly where there is impaired renal function.

Adverse Reactions: All major reactions to sulfonamides and trimethoprim are included, even if not reported with Bactrim. **Blood dyscrasias:** Agranulocytosis, aplastic anemia, megaloblastic anemia, thrombopenia, leukopenia, hemolytic anemia, purpura, hypoprothrombinemia and methemoglobinemia. **Allergic reactions:** Erythema multiforme, Stevens-Johnson syndrome, generalized skin eruptions, epidermal necrolysis, urticaria, serum sickness, pruritus, exfoliative dermatitis, anaphylactoid reactions, periorbital edema, conjunctival and scleral injection, photosensitization, arthralgia and allergic myocarditis. **Gastrointestinal reactions:** Glossitis, stomatitis, nausea, emesis, abdominal pains, hepatitis, diarrhea and pancreatitis. **CNS reactions:** Headache,

peripheral neuritis, mental depression, convulsions, ataxia, hallucinations, tinnitus, vertigo, insomnia, apathy, fatigue, muscle weakness and nervousness. **Miscellaneous reactions:** Drug fever, chills, toxic nephrosis with oliguria and anuria, periarteritis nodosa and L. E. phenomenon. Due to certain chemical similarities to some goitrogens, diuretics (acetazolamide, thiazides) and oral hypoglycemic agents, sulfonamides have caused rare instances of goiter production, diuresis and hypoglycemia in patients; cross-sensitivity with these agents may exist. In rats, long-term therapy with sulfonamides has produced thyroid malignancies.

Dosage: Not recommended for infants less than two months of age.

Urinary Tract Infections: Usual adult dosage—1 DS tablet (double strength), 2 tablets (single strength) or 4 teasp. (20 ml) b.i.d. for 10-14 days.

Recommended dosage for children—8 mg/kg trimethoprim and 40 mg/kg sulfamethoxazole per 24 hours, in two divided doses for 10 days. A guide follows:

Children two months of age or older:

| Weight | | Dose—every 12 hours | |
|--------|-----|---------------------|--------------------------|
| lbs | kgs | Teaspoonfuls | Tablets |
| 20 | 9 | 1 teasp. (5 ml) | ½ tablet |
| 40 | 18 | 2 teasp. (10 ml) | 1 tablet |
| 60 | 27 | 3 teasp. (15 ml) | 1½ tablets |
| 80 | 36 | 4 teasp. (20 ml) | 2 tablets or 1 DS tablet |

For patients with renal impairment:

| Creatinine Clearance (ml/min) | Recommended Dosage Regimen |
|-------------------------------|----------------------------|
| Above 30 | Usual standard regimen |
| 15-30 | ½ the usual regimen |
| Below 15 | Use not recommended |

***Pneumocystis carinii* pneumonia:** Recommended dosage: 20 mg/kg trimethoprim and 100 mg/kg sulfamethoxazole per 24 hours in equal doses every 6 hours for 14 days. See complete product information for suggested children's dosage table.

Supplied: Double Strength (DS) tablets, each containing 160 mg trimethoprim and 800 mg sulfamethoxazole, bottles of 100; Tel-E-Dose® packages of 100. Tablets, each containing 80 mg trimethoprim and 400 mg sulfamethoxazole—bottles of 100 and 500; Tel-E-Dose® packages of 100; Prescription Paks of 40, available singly and in trays of 10. Oral suspension, containing in each teaspoonful (5 ml) the equivalent of 40 mg trimethoprim and 200 mg sulfamethoxazole, fruit-licorice flavored—bottles of 16 oz (1 pint).

POSTGRADUATE OPPORTUNITIES

IN KENTUCKY

JANUARY

- 13 "Medical Ethics,"* University of Louisville and University of Kentucky, Galt House, Louisville

FEBRUARY

- Burn Symposium*, University of Kentucky College of Medicine, Fee: \$75 (physicians), \$35 (nurses and physical therapists), Hyatt Regency Hotel, Lexington
- 24 Eighth Family Medicine Review*, Session III, 50 hrs. AAFP, Category I-AMA Physician's Recognition Award, Fee: \$295, Hyatt Regency Hotel, Lexington
- 25 Fourth International Symposium on Psychopharmacology, University of Louisville Health Sciences Center, (11 prescribed credit hours) Louisville

MARCH

- 30 Twenty-fourth Annual Symposium on Cardiovascular Diseases, University of Louisville Health Sciences Center, Louisville
- C. Dwight Townes Memorial Seminar**, University of Louisville Health Sciences Center, Louisville

APRIL

Twenty-third Annual Spring Clinical Conference, Lexington Clinic, Lexington

IN SURROUNDING STATES

MARCH

"Clinical Orthopaedics," University of Tennessee College of Medicine, Chattanooga. Contact: Leroy Pickles, CME Director, Suite 400, 921 E. 3rd St., Chattanooga, Tenn. 37403.

Forty-first Annual New Orleans Graduate Medical Assembly, New Orleans

For further information, contact: Frank R. Lemon, D., Associate Dean for Continuing Education, University of Kentucky College of Medicine, Lexington 40506

For further information contact: Gerald D. Swim, Executive Director, Office of Continuing Education, University of Louisville School of Medicine, Louisville 40202

Mable Ann Veech Re-Elected

Mabel Ann Veech, Louisville, was re-elected to a 5-year term on the Board of Trustees of the American Association of Medical Assistants. Active at the local, state, and national levels of AAMA, Mrs. Veech is a medical assistant to Jack K. Hellman, M.D.

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Review and Management of Acute Epiglottitis by Orotracheal vs. Nasotracheal Intubation†

R. L. LONG, M.D.,* F. H. PORTER, M.D.,** H. T. MAGUIRE, M.D.,*** and
H. S. NAGARAJ, M.D.****

Louisville, Kentucky

The management of 21 patients with the diagnosis of acute epiglottitis is presented.

UPPER airway obstruction is a common cause for respiratory difficulties in infants and children. There are many causes for upper airway obstruction which must be diagnosed and treated in an orderly fashion. Control of the airway is necessary for the safe management of infants and children (Table 1).¹

The most common cause for upper airway obstruction in children is infection, laryngotracheal bronchitis, or croup. Croup or acute obstructive subglottic laryngitis, acute stenotic laryngitis, or nondiphtheritic croup are all synonyms for acute laryngotracheal bronchitis. This illness is a common occurrence during the winter months and must be differentiated from epiglottitis which occurs much less frequently. The overall incidence of croup and epiglottitis is approximately 40:1.^{2,3} Croup is a disease of viral origin with secondary bacterial invasion. The virus usually implicated is a para-influenza virus.

Mixed bacterial infections found in children with croup include streptococcus, pneumococcus, staphylococcus, and even hemophilus influenza. The pathology includes an inflamed subglottic area of the tracheal bronchial tree. The physical obstruction of the conus silasticus and subglottic area is the site of airway impairment. The glands of the trachea produce increased thick secretions accompanied by poor tracheal toilet. The clinical picture is usually one of a youngster of six months to three years of age who has previously had upper respiratory tract infection. The croupy cough, commonly known as the "bark of a seal," is usually associated with inspiratory and expiratory stridor.

We believe that croup is an illness which is best treated medically and that intubation should be reserved for those individuals showing evidence of severe respiratory difficulties. Certainly, progressive airway obstruction with rapid pulse, restlessness, increasing respiratory rate with sternal, substernal, and subcostal retractions, and evident reduced alveolar ventilation are indications for oro-tracheal intubation.

In contrast, acute supraglottitis, or acute epiglottitis, is an inflammatory swelling of the epiglottic and supraglottic structures, without involvement of the cords or the subglottic tissues in the area of the conus silasticus. Occasionally, swelling of the epiglottic folds and ventricular sphincter can be seen without gross involvement of the epiglottis. This disease characteristically

†Send reprint requests to H. T. Maguire, M.D., Department of Anesthesiology, University of Louisville, P.O. Box 35260, Louisville, Kentucky 40232.

*General Surgery Resident, **Instructor in Surgery (Otolaryngology), ***Assistant Professor of Anesthesiology, ****Assistant Professor of Surgery (Pediatrics), University of Louisville School of Medicine, Louisville

Received at KMA: 8-15-77.

occurs at any time of the year but is more common in the winter, as is croup. *Hemophilus influenza* has been identified as the causative agent. The age of onset is approximately three to six years, in contrast to croup, which is believed to occur at 18 months to three years. Usually the course is very rapid and may be as short as two hours, unlike croup which has a more prolonged course. Severe dyspnea and drooling are serious signs of croup and of imminent upper airway obstruction.

In acute epiglottitis, the child's voice is usually clear with little or no cough as is usually present with croup. Characteristically, children usually sit up with chin forward, mouth open, tongue protruding with dyspnea, dysphagia, drooling, high fever, pale shock-like face, and marked leucocytosis.^{4,5} These youngsters generally realize that rapid or deep inspiration will cause an obstructive phenomenon and immediate obstruction of their airway. This obstructive phenomenon is due to a ball-valve effect in which the swollen epiglottis causes immediate and total airway obstruction. The airway of a youngster with epiglottitis is in imminent danger and should be dealt with in an expeditious and safe manner.

A team approach should be taken in the man-

agement of these youngsters as soon as the diagnosis is suspected. The purpose of this study is to review the treatment and management of patients admitted to Children's Hospital with the diagnosis of acute epiglottitis.

Method and Material

Twenty-one patients with the diagnosis of acute epiglottitis were admitted and treated at Children's Hospital from January 1971 to May 1977. The age range was from 18 months to 4½ years with a mean age of 2.6 years. Male to female ratio was approximately equal.

Diagnosis was established by x-ray alone in three patients (Fig. 1), by x-ray and direct examination in six patients, and by direct examination only in the remaining 12.

Sixteen patients were brought to the surgical area and an airway was established by oro-tracheal intubation. Three patients were intubated in the emergency room apparently because the urgency of the airway left the examining physician no alternative. Three patients with x-ray proven epiglottitis were treated expectantly without the assistance of tracheotomy or intubation. Tracheotomy was performed in two patients in an emergency situation after unexpected extubation. All patients were treated with ampicillin, corticosteroids, and mist. The hospital stay ranged from three to six days with a mean average of 4.7 days.

Discussion

In a recent review Schuller and Birk found croup and epiglottitis appeared in a ratio of 15:1⁶ However, other studies have indicated that croup falls within an incidence range of approximately 40:1.^{2,3} At Children's Hospital the incidence ratio is approximately that of 40:1.

Establishment of an artificial airway is basic in the treatment of acute epiglottitis. Tracheostomy was and remains the method of choice.⁷⁻¹⁰ Even so, more reports are appearing in the medical literature showing the advantages of nasotracheal intubation in the management of the epiglottitis.^{5,6,11-14} Among the advantages quoted are the lower incidence of irreversible complications (1.6% in contrast to 12% in pediatric tracheostomy), the mortality rate of 3.6% in the tracheostomy patient compared to 0% in patients treated by intubation and a shorter hospital stay



FIG 1 Arrow shows inflamed swollen epiglottitis.

Table 1
AIRWAY OBSTRUCTION

| |
|----------------------------------|
| Upper airway obstruction |
| Croup |
| Infectious |
| Post-intubation |
| Epiglottitis |
| Congenital subglottic stenosis |
| Foreign body |
| Vocal-cord paralysis |
| Vascular ring |
| Granuloma |
| Burns |
| Lower airway obstruction |
| Status asthmaticus |
| Bronchopneumonia (bronchiolitis) |
| Smoke inhalation |
| Cystic fibrosis |
| Aspiration syndrome |
| Lobar emphysema |

of the intubated patients of 3.9 days versus 6.5 days for those with tracheostomy.⁶

In acute respiratory failure, our method of choice is orotracheal intubation because of its simplicity. It is well tolerated by the patients, allows easier suctioning, and has fewer immediate complications, such as severe hemorrhage resulting from adenoid trauma, traumatic lesions to the aryepiglottic folds, vallecula, pyriform sinuses, and vocal cords. Pulmonary infections are more frequent with nasotracheal than with orotracheal intubation.^{15,16}

Securing of the tube in nasotracheal intubation has been advocated as the chief advantage of tube placement via this route. However, we believe that an orotracheal tube can be safely secured and taped around the infant's or child's head with equal safety compared to nasotracheal intubation.

The short duration of intubation required in most cases of croup or epiglottitis certainly warrants the placement of a tube through the mouth. Disadvantages such as salivation and chewing of the tube have not been seen. Since intubation in acute epiglottitis may be a difficult procedure, we believe that changing an orotracheal tube for a nasotracheal tube is unnecessary and dangerous.

After checking the position of the tube with a chest x-ray the skin and the tube are painted with benzoin as is routinely done during anesthesia, and the tube is secured with waterproof tape to a Logan bow taped to the face (Fig. 2). Should the patient become very restless, we do not hesitate to administer diazepam 0.2 mg/kg intra-

venously or chloral hydrate for sedation. In addition, arm splints offer security against extubation.

As soon as the diagnosis of acute epiglottitis is suspected by the pediatrician, the anesthesiologist, pediatric surgeon, and otolaryngologist are notified. The patient is moved to the operating room where a bronchoscopy and laryngoscopy set and tracheostomy tray are prepared. If the condition is such that cardiac arrest is imminent, ventilation and intubation are done in the emergency room by the pediatrician. X-ray of the neck is done only when the condition is mild, the general status of the patient is good, and the differential diagnosis between croup and epiglottitis is important for the treatment. We intubate for all cases of epiglottitis but only for the most severe croup.

In the operating room, anesthesia is induced with oxygen 100% and halothane with assisted or controlled ventilation. If the patient becomes obstructed with spontaneous breathing, artificial ventilation is easy to accomplish and the same has been observed by others.⁵ Once a proper level of anesthesia is achieved, the patient is intubated using a MacIntosh laryngoscope blade. Halothane is discontinued and the patient is moved to the pediatric ICU as soon as spontaneous respiration is re-established.

Medical management includes hydration, ampicillin, steroids (dexamethasone 1 mg/kg/24 hr) and oxygen (40% with humidity—cool mist). Chloromycetin is recommended for ampicillin-resistant strains of *Hemophilus*.

Extubation is performed after 48 hours during the day. Equipment for reintubation is kept readily available in case the patient's condition deteriorates.



FIG 2 Orotracheal tube transfixed in place.

References

1. Downes, J.J. and Raphaely, R.C. Pediatric Intensive Care. *Anesth.* 43:238-250, 1975.
2. Feron, B. Acute laryngotracheobronchitis in infancy and childhood. *Pediat. Clin. N. Amer.* 9:1095, Dec. 1962.
3. Feron, B. Acute obstructive laryngitis in infants and children. *Hosp. Med.* 4:51, Dec. 1968.
4. Addys, M.G., Ellis, P.D.M. and Turk, D.C. Haemophilus Epiglottitis: Nine recent cases in Oxford. *Brit. Med. J.* 1: 4041, 1972.
5. Adair, J.C. and Ring, W.H. Management of Epiglottitis in Children. *Anesth. Analg.* 54:622-624, 1975.
6. Schuller, D.E. and Birk, H.E. The Safety of Intubation in Croup and Epiglottitis: An eight-year follow-up. *Laryngoscope* 85:33-45, 1975.
7. Frostad, A.B. and Ronning-Arnesen, A. Tracheostomy in Acute Obstructive Laryngitis. *J. Laryngeal. Otol.* 8711: 1101-1106. 1973.
8. Margolis, C.Z., Ingram D.L. and Meyer, J.H. Routine Tracheostomy in Hemophilus Influenza Type B Epiglottitis. *J. Pediat.* 81:1150-1153, 1972.
9. Rapkin, R.H. Tracheostomy in Epiglottitis. *Pediatrics* 52:426-429, 1973.
10. Steward, D.J. Guest Discussion. Management of Epiglottitis in Children. *Anesth. Analg.* 54:622-625, 1975.
11. Traff, B. and Tos, M. Nasotracheal Intubation in Acute Epiglottitis. *Acta Otolaryngol.* 68:363-368, 1969.
12. Heldtander, P. and Lee, P. Treatment of Acute Epiglottitis in Children by Long Term Intubation. *Acta Otolaryngol.* 75:379-381, 1973.
13. Tos, M. Nasotracheal Intubation in Acute Epiglottitis. *Acta Otolaryngol.* 97:373-375, 1973.
14. Oh, T.H. and Motoyama, E.K. Comparison of Nasotracheal Intubation and Tracheostomy in Management of Acute Epiglottitis. *Anesth.* 46:214-216, 1977.
15. DiCarlo, R., Zahler, A., Aldrete, J.A. and Pappas, G. Prolonged Naso-/and Orotracheal Intubation in Cardiac Surgery Patients. *Rocky Mountain Med. J.* 67:23-27, 1970.
16. Aldrete, J.A. Nasotracheal Intubation. *Surg. Clin. N. Amer.* 49:1209-1215, 1969.

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Gait Ataxia in Hypothyroidism†

SAMARD ERKULVRAWATR, M.D.

Louisville, Kentucky

Ataxia is an unusual manifestation of hypothyroidism. Early recognition and treatment of hypothyroidism results in complete remission of the symptoms. This paper reports two cases with dramatic improvement by using thyroxin.

CEREBELLAR ataxia in association with hypothyroidism and myxedema was first reported by Soderbergh in 1911. This association was not fully recognized until Jellinek and Kelly¹ reported another six cases of this syndrome in 1960 which responded favorably to thyroid medication. Two cases of this syndrome are reported and both responded promptly and dramatically to thyroid therapy.

Case Reports

Case 1: A 44-year-old man was seen for dizziness, poor balance, and incoordination of his hands for several years duration. He was treated with the antidepressant drug, amitriptyline, without benefit and was seen again two years later because of dizziness and "falling spells."

The patient was somewhat overweight and had a "puffy face." He was dull and slow to respond to questions. Facial expression was monotonous and speech was "thick" and husky. B.P. was 112/60 mmHg. Cranial nerve examination was normal and motor strength was intact. The sensory examination was normal. There was a wide based gait and steps were clumsy but with no particular predilection of falling. The deep tendon reflexes were hypoactive, delayed and "hung up", particularly the ankle jerk. There was no Babinski response.

Laboratory studies including CBC, U/A, electrolytes and VDRL were normal. The PBI was

1.6 microgram %, T₃ 35% and T₄ 0.7 microgram %. An anti-thyroid antibody had a titer of 1:25,000, which suggested Hashimoto's thyroiditis. The EEG showed a mild diffuse non-specific abnormality and skull x-ray and brain scan were normal.

A diagnosis of hypothyroidism was made and synthetic thyroxin was given. Immediate improvement was noted within a week after initiation of therapy. Follow-up in six months showed marked improvement of his mental and neurological function.

Case 2: A 62-year-old man was seen initially at the age of 58 for nervousness, stomach ulcer, and dizziness that lasted for "a minute or two." Upon occurrence, "he had to hold onto something to keep from falling." Anxiety neurosis was diagnosed and treated with diazepam (Librium) and thioridazine (Mellaril). A year prior to admission, tinnitus, vertigo and gait difficulty occurred. He complained of mild steady dull headache and memory difficulty. A few months prior to admission, hand coordination deteriorated and subsequently there developed a mild tremor in both hands. His gait worsened and he had to resort to a cane for walking.

He was moderately obese with myxedematous face and deep husky voice. B.P. was 140/100 mmHg, skin was dry and scaly, body hair was brittle and sparingly distributed. He answered questions slowly with poor concentration and attention span. Cranial nerves, and motor examinations were normal. There was a glove-stocking type of sensory loss over the lower extremities and the reflexes were hypoactive bilaterally. There was no Babinski's response. The patient walked with wide-based gait and he could not tandem walk. There was 50% decrease of alternating motion movement of both hands and tongue.

CBC, U/A, electrolytes, skull films and tomogram of the petrous ridges were normal. PBI on three separate occasions was 3.2, 4.1 and 3.8 microgram %, T₃ was 22.8% and T₄ was 2.3 microgram %. Twenty-four hour I¹³¹ uptake was

†From the Medical Service, Neurology Section, VA Hospital and the University of Louisville School of Medicine, Louisville. Partially supported by Research Service, VA Hospital, Louisville.

normal. The anti-thyroid titer was 1:16,000. TSH stimulation test failed to show any rise, in fact T_4 dropped slightly. A biopsy of the thyroid gland showed a marked variation in size of follicles and the parenchyma was infiltrated by mononuclear cells compatible with Hashimoto's thyroiditis. (Fig. 1) The patient received synthetic thyroxin (Synthyroid) 1.5 mg a day. Cinematography was taken before and after treatment and the patient responded dramatically to the medication. He was able to walk without the cane, his gait was normal, and he performed tandem gait well.

Discussion

Myxedematous patients are slow and clumsy, but this may be a manifestation of a hypometabolic state rather than cerebellar in origin. Although there were at least 35 cases of ataxia with hypothyroidism reported, the pathological correlation is not extensive. Degenerative changes in the anterior and superior portion of the vermis, together with atrophy of the ventral portion of the pons and middle and superior cerebellar peduncles had been reported.^{2,3} The degenerative changes in the cerebellum described in autopsy cases were similar to those found under other conditions, particularly in alcoholic cerebellar degeneration.⁴ Thus, degeneration of antero-superior lobe and vermis may not be a specific pathologic change in this entity. Other neurologic manifestations such as deafness, carpal tunnel syndrome and peripheral neuropathy may be associated with myxedema.⁵ Ataxia of gait and cerebellar symptoms may occur in alcoholic cerebellar degeneration, systemic neoplasms and lesion of the cerebellum and cerebellar pathways. Thus, these etiological factors should be investigated concomitantly with the thyroid function studies.

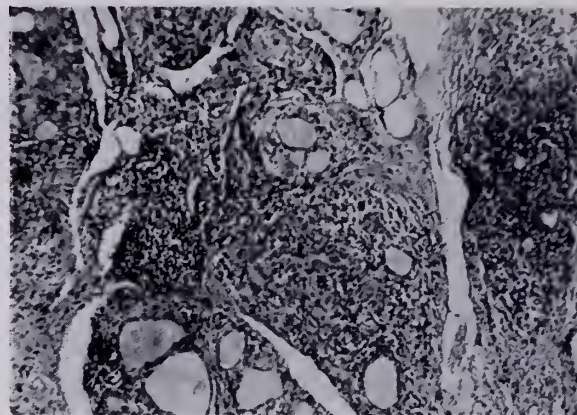


FIG 1—Thyroid gland of patient number two: Note the thick connective tissue septa containing inflammatory cells and infiltrated by lymphocytes, plasma cells and histiocytes as well.

Several mechanisms may explain the ataxia in myxedema such as the changes in cerebrovascular dynamics, cardiac output and reduction of cerebral blood flow. Ataxia in some patients, including two of ours, responded promptly to treatment suggesting that changes in metabolic and/or enzymatic function of neural tissue are more likely to be a causative factor. Recognition of the association of this condition is important, since replacement of thyroid hormone usually results in dramatic improvement of ataxia and other neurologic symptoms.

References

1. Jellinek, E.H. and Kelly, R.E. Cerebellar Syndrome in Myxedema. *Lancet* Vol. 2, 225, 1960.
2. Nickel, S.N., Frame, B., Bebin, J. et al, Myxedema neuropathy and myopathy. A clinical and pathologic study. *Neurol.* Vol. 11, 125, 1961.
3. Price, T.R., and Netsky, M.G. Myxedema and ataxia. Cerebellar alterations and 'neural' myxedema bodies. *Neurol.* Vol. 16, 957, 1966.
4. Victor, M., Adams, R.D. and Mancall, E.L. A restricted form of cerebellar cortical degeneration occurring in alcoholic patients. *Arch. Neurol.* Vol 1, 579, 1959.
5. Cremer, G.M., Goldstein, N.P., Paris, J. Myxedema and ataxia. *Neurol.* 19, 37, 1969.

Treatment of Tuberculosis†

PETER B. BARLOW, M.D.*

Tuberculosis has not disappeared. Although rates are declining in the United States, the disease still overtakes far more persons than it should. It remains a rewarding disease for the physician to treat because there are effective drugs to fight it.

The modern drug-use era of tuberculosis therapy began in 1944 with streptomycin. Isoniazid, still the premier drug in tuberculosis treatment, was introduced in 1952.

Controlled cooperative clinical trials established that brief courses of chemotherapy, comparable to those used for most bacterial infections, were of no benefit. Duration of therapy was progressively extended until it was shown that 18-24 months of treatment was necessary to prevent the emergence of resistant organisms.

It is now known that the only absolute necessity for the treatment of tuberculosis is the actual ingestion of effective antituberculosis drugs for the required period of time. Constraints, such as rest, diet, no alcohol, and leaving work, have been found unnecessary. And now in the few cases where hospitalization is advised, it usually occurs for a short time in a general hospital, not in a sanatorium.

Most patients, during the 18-24 month treatment period, feel fine. A first and constant necessity in treatment is the education of each patient in the necessity of continuing to take the prescribed antituberculosis drugs consistently, every day, in the required doses, even though he or she may not feel sick.

Daily therapy for periods as short as six or seven months has been used successfully in other countries. Short-term chemotherapy is being evaluated at this time in the United States. Results are encouraging, but such regimens should be used only under carefully controlled circumstances until the data are clear.

Pathogenesis

To diagnose tuberculosis, the pathogenesis of the disease in the human host must be understood. Tuberculosis is transmitted by airborne droplet nuclei (containing tubercle bacilli) which are expelled into the air when a person with pulmonary or laryngeal tuberculosis coughs, sneezes, speaks, or sings.¹ Only rarely is the disease transmitted in any other manner.

Many droplet nuclei are capable of floating in the immediate environment for several hours. Large particles may be inhaled by a person breathing the same air and impact on the trachea or wall of the upper airway. There they are trapped in the mucous blanket, expectorated, or swallowed, with no infection resulting. Nuclei of about five microns in diameter may find their way down to the alveoli. If that person has not previously been infected with tubercle bacilli, the organisms invade tissue and multiply without immediate hindrance from host defenses. As the bacilli multiply, they spread through lymphatic channels to regional lymph nodes, and through the blood stream to the rest of the body.

As different organs of the body are seeded with the mycobacteria, they react in different ways. Some organs are notably more resistant than others to the multiplication of the organisms. The upper lung zones are particularly susceptible. Eventually multiplication is suppressed by the development of specific cellular immunity, which is variably manifest from two to 10 weeks following impaction of the bacilli in the alveoli. A positive tuberculin skin reaction is the specific indicator that immunity has developed.

Approximately five percent of the persons experiencing initial infection have inadequate cellular defenses. Symptomatic tuberculous disease occurs in them within weeks or months after the initial infection. In another approximately five percent of infected persons, disease develops at a time remote from the original invasion.² From puberty to age 30 is a particularly susceptible period for progressive disease to develop—accounting in prior eras for the great numbers of persons who died of tuberculosis in the prime of their lives.

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*Associate Professor of Clinical Medicine, Dartmouth Medical School, Director of Pulmonary Disease, Mary Hitchcock Clinic, Hanover, New Hampshire.

The remaining 90% of infected persons possess cellular immunity that functions well, so they are free of actual disease throughout their lifetimes.

Diagnosis

Anyone can develop tuberculosis. Persons with inadequate nutrition or living in crowded conditions appear to be more susceptible. Those at high risk of becoming sick with tuberculosis include: those in close contact with someone whose tuberculosis is infectious, persons whose tuberculin skin tests have recently changed from negative to positive, individuals who manifested the disease years before the advent of effective drug treatment, and those with a chest x-ray suspicious of tuberculosis.

Patients taking cortisone for another disease, as well as those who have diabetes or silicosis, are also at greater risk of developing tuberculous disease.

Approximately 70% of persons with tuberculous disease seek medical care because of symptoms. The remainder are asymptomatic, discovered at routine health assessments or through health department investigation of close contacts of persons who are newly-diagnosed patients.

The tuberculin skin test plays a key role in diagnosis of all patients. It is easily applied, is very specific, and in its stabilized form generally does not produce either false negative or false positive results.³ It should, however, be kept in mind that many persons extremely sick with tuberculosis will have negative skin tests.

The possibility of tuberculosis should be considered in almost any patient with a chest x-ray abnormality. Reactors to tuberculin in the United States comprise about seven percent of the population⁴; they may develop other illnesses that should not automatically be excluded upon demonstration of a positive tuberculin test. The differential diagnosis of lung cancer and tuberculosis in the patient over 45 years of age is particularly important because the symptoms and x-ray abnormalities of the two illnesses may be quite similar.

Final diagnosis of tuberculosis depends upon demonstration of a positive culture for *M. tuberculosis*. Collection of appropriate specimens should be undertaken at the earliest possible time to assure correct diagnosis.

Positive smears of sputum or other body secretions for acid-fast bacilli are presumptive evidence of tuberculosis—they must be confirmed by cul-

ture. It is customary to obtain several specimens to insure against damage by accident or contamination with other micro-organisms. Once these specimens have been obtained, treatment should begin while awaiting results. Studies of the sensitivity of the bacilli to various drugs may also begin here, but at no time should disease be allowed to progress while awaiting results of either the culture or sensitivity studies—which may take six to eight weeks.

Treatment

The treatment of tuberculosis is prolonged and, as stated previously, during most of the chemotherapeutic period, the patient feels very well. If treatment is discontinued after an initial response, there is usually no immediate resumption of symptoms, and for this reason the patient can be lulled into a false sense of security.

To compound the problem, tuberculosis is, by and large, a disease of those who live in poor and crowded areas. Although tuberculosis is thought of as an urban disease, one-half the cases in the United States occur in small cities and rural areas. Such patients usually have problems far more pressing than health; they often find it difficult to understand the need for continuing therapy after they feel well.

The early management of the disease with each patient is very important. Proper education about the reasons for faithful adherence to the drug regimen is mandatory.

The monitoring of treatment is also necessary. Patients should be seen every month, given constant reassurance as to the reasons for faithful drug ingestion, and checked for possible side effects of the drugs. Proper response to the drugs should also be ascertained. The response of the patient and his disease provides valuable clues as to the appropriateness of the therapy.

Where to Treat

Tuberculosis is infectious. Obviously, it is important to minimize the potential for transmission to other persons. Ingestion of the antituberculosis drugs, however, quickly reduces the risk of infection. The prior need for treatment in prolonged isolation exists no more⁵.

The place and mode of therapy should be chosen to provide: 1) the most rapid relief of symptoms; 2) rapid return to normal health; 3) insurance against transmission of infection. These

goals should be met with minimal dislocation to patient, family, home, work.

Hospitalization is necessary only when the patient is sick enough to require supportive care, when certain hospital based tests are necessary for proper diagnosis, and, in some instances, when temporary isolation cannot be achieved at home.

Home care is perfectly reasonable under most circumstances. The past practice of hospitalizing all patients for long periods in sanatoriums is no longer justifiable on medical or public health grounds.⁶

Indications for Isolation

Several studies have conclusively demonstrated that the risk of infection exists **prior** to diagnosis and initiation of chemotherapy of the patient. The original studies by the British Medical Research Council in Madras, India, treated one group of patients at home and an equally sick group in the hospital.⁵ Follow-up tuberculin testing showed that household contacts of both groups converted to positive skin tests at a low rate following the initiation of chemotherapy to the index case. This occurred despite the fact that the hospitalized patients were completely isolated from their household contacts.

The rapid decline in infectiousness following the start of chemotherapy is confirmed by studying the numbers of infectious particles coughed up by patients.⁷ The number of such particles declines rapidly following the start of therapy, and the cough rapidly disappears. Loudon has estimated that patients are 1/1400th as infectious after one month of chemotherapy as they were prior to its start.⁷

It is difficult to apply general rules to when a patient is noninfectious. In most patients, however, effective chemotherapy puts a stop to infectiousness. Decline in malaise, fever, cough, and bacilli in the sputum smear all serve to determine if a patient is receiving effective chemotherapy; often these indications occur within two weeks after the start of drug treatment.

Patients with negative sputum smears do not require special precautionary measures. Patients with positive smears should initially be restricted or isolated in some fashion. Such restriction does not obviate home care, especially where exposure of new contacts for two weeks can be avoided. To reduce transmission, efforts should be taken to prevent high concentrations of organisms in the

patient's immediate environment. The coughing patient with positive sputum smears should be placed in a room with good ventilation and no recirculating air. He should be instructed to cover the mouth when coughing.

Ultraviolet light, which kills tuberculosis organisms, can be used with some effect in certain situations. Use of gowns, special plates or other dishes, and disinfectants is of no value in preventing transmission.

Duration of isolation should be adjusted to each patient's special situation. As symptoms—malaise, fever, cough—and the evidence, if any, of bacilli in the sputum are carefully monitored, it can be ascertained whether or not effective chemotherapy is being given. Such symptoms also serve as a means by which it can be determined if the patient reasonably can be considered noninfectious. Precautionary measures should also take into account the persons at risk of becoming infected and results of investigation of contacts, which practically determine the extent to which the patient transmitted his disease prior to diagnosis. All of these factors should be analyzed to arrive at reasonable practices that assure the best treatment for the patient, at the same time maintaining adequate safety for others.

Chemotherapy

The necessity for treatment with multiple drug regimens has been confirmed repeatedly by experience.⁸ The theoretic rationale is based upon knowledge of the incidence of wild-strain mutants to a given antibiotic. The number of naturally occurring isoniazid-resistant bacilli is about 1 in 10^5 ; the number for streptomycin is about 1 in 10^6 . There would then be only 1 in 10^{11} bacilli resistant to both drugs. Although the number of bacilli in a diseased patient varies considerably, it may only rarely exceed 10^{11} , thereby assuring effectiveness for the combination. The successful results from using regimens of more than one drug support this concept, even if other factors may play a role.

In initial therapy, at least two drugs should always be started. In instances of retreatment, the physician should know through sensitivity testing that the drugs are ones to which the organisms are sensitive.

The choice of regimens varies, influenced by multiple factors. Ideally, it is hoped the regimen chosen will produce: the most rapid killing of organisms (conventionally measured by smears

and cultures of sputum); prevention of emergence of drug-resistant organisms; and an effective course of therapy that will prevent relapse. Practically, the choice of regimens is influenced by the method of administration, potential side effects, and cost.

Isoniazid and ethambutol are presently used for initial treatment of the vast majority of patients in the United States. This combination has very low toxicity, ease of administration, low cost, and high effectiveness. Many physicians add streptomycin or rifampin for the first six to eight weeks in patients with extensive cavitory disease. Experimental evidence suggests that such addition can effect more rapid conversion of sputum and prevent emergence of resistance.⁹

It is quite clear that the isoniazid-rifampin combination is very effective in converting the sputum, although it is not warranted in all persons because the cost is high and there is substantial toxicity. Isoniazid-rifampin regimens are presently under investigation for their potential benefit in shortening the course of chemotherapy. There have been encouraging initial results.¹⁰

Chemotherapeutic Agents

Isoniazid (INH). Isoniazid, combining high effectiveness with low toxicity and low cost, is the principal agent used to treat tuberculosis. It is universally accepted as the drug of choice to be used in every regimen for the initial treatment. It is absorbed well after oral or parenteral administration, penetrates tissues well, is acetylated in the liver, excreted via the kidneys, and is bactericidal for multiplying organisms at concentrations easily attained in the blood. Present evidence implicates inhibition of DNA synthesis as its mode of action.

Few patients experience adverse side effects requiring discontinuance of the drug. There are, however, several toxic effects of isoniazid. Hepatitis is the most serious, and, in rare instances, it has been fatal.¹¹ Overt hepatitis occurs in approximately one percent of recipients. Some elevation above normal of serum transaminase levels occurs in about 10% of isoniazid recipients. Toxicity tends to occur early in therapy, but it can become manifest anytime. It is related to some of the metabolic products of isoniazid that have direct hepatotoxicity.

Isoniazid should be discontinued when hepatitis develops. Transaminase elevations without overt

hepatitis are approached differently. In preventive therapy, most physicians will withdraw therapy if the transaminase level is two to three times normal and follow the patient to demonstrate a return to normal. In patients on chemotherapy for disease, higher levels are often tolerated due to the greater projected gain from the therapy. Obviously, many individual considerations play a role in such decisions.

Other side effects of isoniazid include peripheral neuritis, central nervous system toxicity, adverse interaction with diphenylhydantoin, a lupus erythematosus-like syndrome, and an allergic drug reaction with fever, rash, and eosinophilia.

Fortunately, all of these side effects are uncommon or avoidable. Peripheral neuritis results from receptor site competitive inhibition of pyridoxine by isoniazid. Neuritis can be prevented or treated by administration of pyridoxine.

Central nervous system toxicity may be seen in epileptics or in instances of overdose; it may also be avoided or treated with pyridoxine.

Ethambutol (EMB). Currently the companion drug of choice in initial treatment with isoniazid, ethambutol is of only medium effectiveness by itself. Its ease of administration, effectiveness in combination with isoniazid, and low toxicity have made it the replacement of para-aminosalicylic acid.

Ethambutol's only important toxic effect is dose-dependent optic neuritis. This toxicity occurs in about three percent of patients receiving 25 mg/kg/day over several months; such toxicity is seen only rarely with 15 mg/kg/day—the commonly accepted dose.¹² Because ethambutol is excreted in the urine, it must be used at reduced dosage in renal failure.

Rifampin (RMP). This is the newest drug effective against tuberculosis. Like isoniazid, it is bactericidal and highly effective; unlike isoniazid, it is also effective against most other mycobacteria, as well as other organisms.

Rifampin is readily absorbed from the gut and excreted through the biliary tree and kidneys. Its bactericidal action derives from inhibition of DNA-dependent RNA polymerase activity in dividing cells.

RMP's high cost and slightly greater toxicity, as compared to isoniazid, have led to its use primarily for retreatment patients and those in special situations.

When rifampin is combined with isoniazid,

there is significantly more liver toxicity than with either drug alone, a fact that discourages the regular use of this highly effective combination.

Side effects of rifampin include hepatitis, several types of hypersensitivity reactions, thrombocytopenia, leukopenia, and depression of the immune response, which is, as yet, of questionable significance. The hypersensitivity reactions to RMP include rash, fever, abdominal pain, dyspnea, purpura, and a rare hypotensive reaction similar to anaphylactic shock. These reactions have occurred mainly when rifampin has been given intermittently (twice a week). Another problem with intermittent administration of rifampin is rapid development of resistant organisms.

Streptomycin (SM). This was the first truly effective drug for the treatment of tuberculosis. It is administered only parenterally. This limits its usefulness for self-medication in the outpatient setting, but makes it appropriate for supervised therapy.

The principal side effect of streptomycin is that on the vestibular and cochlear divisions of the eighth nerve. Permanent damage may occur if the drug is not discontinued with onset of symptoms. The drug is excreted through the kidneys and, like ethambutol, has to be given at reduced dosage when renal failure occurs. Streptomycin is used mainly today in initial three-drug therapy, for unconscious patients and others who cannot swallow pills, for children with tuberculous meningitis, for retreatment patients, and in situations where documentation of adequate therapy in controlled treatment situations is necessary. Since adequate oral drugs exist, the use of the parenterally administered streptomycin is limited.

Second-line Drugs. For years, para-aminosalicylic acid was the principal companion drug, first with streptomycin and then with isoniazid. It has only moderate antimycobacterial action by itself. Its two major drawbacks are marked gastric irritation in most adults and the need to ingest 24 large pills per day. It has been generally replaced by the much more acceptable ethambutol.

Cycloserine, ethionamide and pyrazinamide are the three other major oral agents used against mycobacteria. The first has primarily central nervous system toxicity, and the other two can produce gastrointestinal and liver toxicity.

Kanamycin, viomycin, and capreomycin are three injectable amino-glycosides, which are similar in action and toxicity to streptomycin.

All of these lesser drugs are used in various appropriate regimens for retreatment of resistant *M. tuberculosis* disease or for disease due to other mycobacteria. Because of less effective and greater toxicity than the major drugs, they are rarely, if ever, indicated for initial therapy.

Therapy Follow-Up

Data imply that symptoms—cough, fever, appetite-weight loss, and lack of a sense of well-being—all respond to appropriate chemotherapy within the first week or two. Complete return to normal is related to the duration of symptoms prior to therapy: the longer-lasting the symptoms have been, the longer time it will take to return to normal. Clinical evaluation and progressive changes in sputum smear positivity indicate within two weeks whether the chemotherapy is effective.

Later on, the treatment of tuberculosis depends primarily on the continued maintenance of therapy in relatively well patients. Again, it should be emphasized, education of the patient on the importance of faithfully taking the medicines is of greatest importance. Such education should start at the first contact and continue consistently throughout the entire 18-24 months of therapy.

Regular monitoring of the chest x-ray and sputum status is of critical importance in follow-up care. Seventy-five percent of the patients are sputum culture negative at three months and 95% at six months. The chest x-ray can be expected to show changes for the better within one month and should clear or become stable in 90% of patients by six months.

Any changes for the worse in symptoms, x-ray, or sputum culture should prompt re-evaluation to assure that the correct regimen is not only being prescribed but actually ingested. If the patient is suspected of not taking the prescribed medication, steps should be taken to make sure that he does. In some instances, a program of intermittent, directly-supervised therapy given by a nurse or other responsible person may be the best way to assure that drugs are being ingested.

Intermittent, directly-supervised therapy is being used increasingly in urban and rural settings to assure adequate drug administration. Twice- or thrice-weekly medication schedules with INH-

streptomycin or INH-ethambutol have proved effective in controlling disease while providing assurance of drug administration. The drugs are given in larger doses for each visit, but at total weekly doses comparable to cumulative daily therapy. If a patient does not meet an appointment, he is immediately sought.

The concern and attention often win over the suspicious patient so that self-medication can be used later in the course of therapy. The superiority in patient acceptance and cost compared to hospitalization to assure compliance is obvious.

In persons with persistent cavities, very slow

clearance of sputum, or resistant organisms, therapy is often arbitrarily extended for a year or two beyond the mandatory 18-24 months.

When there is good reason to believe that adequate therapy has been given, and taken, there is no benefit gained by continued surveillance following the end of therapy. The prevalence of relapse is so low in this group that unreasonable fear and dependency can be induced by continued follow-up. Such patients are not likely to develop tuberculosis again and should be so assured. Medical evaluation would be indicated only if the former patients developed debility, chronic

Table 1
TREATMENT OF MYCOBACTERIAL DISEASE IN ADULTS AND CHILDREN*
First-Line Drugs

| DRUG | DOSAGE | | SIDE EFFECTS | MONITORING | REMARKS |
|--------------|----------------------------------|-------------------|--|--|---|
| | Daily | Twice Weekly | | | |
| Isoniazid | 5-10 mg/kg up to 300 mg PO or IM | 15 mg/kg PO or IM | Peripheral neuritis, hepatitis, hypersensitivity | SGOT/SGPT (not routine) | Bactericidal; for neuritis, pyridoxine, 10 mg as prophylaxis; 50-100 mg as treatment daily. |
| Ethambutol | 15 mg/kg PO | 50 mg/kg PO | Optic neuritis (reversible with discontinuation of drug; very rare at 15 mg/kg); skin rash | Red-green color discrimination and visual acuity | Use with caution in renal disease or when eye testing is not feasible. |
| Rifampin | 10-20 mg/kg PO, up to 600 mg | | Hepatitis, febrile reaction, purpura (rare) | SGOT/SGPT (not routine) | Bactericidal; orange urine color, benign. |
| Streptomycin | 15-20 mg/kg up to 1 g IM | 25-30 mg/kg | 8th nerve damage, nephrotoxicity | Vestibular function, audiograms, BUN, and creatinine | Use with caution in older patients or those with renal disease. |

Second-Line Drugs

| DRUG | DOSAGE | | SIDE EFFECTS | MONITORING | REMARKS |
|---------------------------|--------------------------|--|---|--|---|
| | Daily | | | | |
| Viomycin | 15-30 mg/kg up to 1 g IM | | 8th nerve damage, nephrotoxicity, vestibular toxicity (rare) | Vestibular function, audiograms, BUN, and creatinine | Use with caution in older patients, rarely use with renal disease. |
| Capreomycin | 15-30 mg/kg up to 1 g IM | | 8th nerve damage, nephrotoxicity | Vestibular function, audiograms, BUN, and creatinine | Use with caution in older patients, rarely use with renal disease. |
| Kanamycin | 15-30 mg/kg up to 1 g IM | | 8th nerve damage, nephrotoxicity, vestibular toxicity (rare) | Vestibular function, audiograms, BUN, and creatinine | Use with caution in older patients, rarely use with renal disease. |
| Ethionamide | 15-30 mg/kg up to 1 g PO | | Gastrointestinal, hepatotoxicity, hypersensitivity | SGOT/SGPT | Divided dose may help GI side effects. |
| Pyrazinamide | 15-30 mg/kg up to 2 g PO | | Hyperuricemia, hepatotoxicity | Uric acid, SGOT/SGPT | Combination of pyrazinamide and amino-glycoside is bactericidal. |
| Para-amino-salicylic acid | 150 mg/kg up to 12 g PO | | Gastrointestinal, hypersensitivity, hepatotoxicity, sodium load | SGOT/SGPT | GI side effects very frequent, making cooperation difficult. |
| Cycloserine | 10-20 mg/kg up to 1 g PO | | Psychosis, personality changes, convulsions, rash | Psychologic testing | Very difficult drug to use. Side effects may be blocked by pyridoxine, ataractic agents, or anticonvulsant drugs. |

Check product labeling for detailed information on dose, contraindications, drug interaction, adverse reactions, and monitoring.

*American Thoracic Society: *Treatment of Mycobacterial Disease*. Based on a Statement by an Ad Hoc Committee, to be published.

cough, or other symptoms suggestive of tuberculosis.^{8,13}

Extrapulmonary Tuberculosis

Pulmonary involvement accounts for tuberculous disease in almost 90% of patients. The disease can, however, occur anywhere in the body, with renal, skeletal, and meningeal forms being the next most common.

The principles of therapy are similar to those used for pulmonary tuberculosis. Methods other than sputum examination are obviously needed for diagnosis and for monitoring therapy. Attempts should always be made to recover the organisms from urine, spinal fluid, other secretions, or from biopsy material. It is important to note that extrapulmonary disease often exists without signs of pulmonary tuberculosis.

Chemotherapy has virtually eliminated the need for surgical procedures in pulmonary and extrapulmonary tuberculosis. In certain forms of extrapulmonary disease, special procedures still are necessary. Empyemas of the chest and psoas abscesses of the back often must be drained; the vertebral column may require a period of immobilization during early therapy and, rarely, surgical fixation; and kidneys must occasionally be removed.

Tuberculosis in Children

Tuberculosis in children has certain characteristics different from those commonly seen in adults. The difference between the disease in children and older patients seems to be related either to chance detection or to the development of significant symptoms which lead to medical evaluation during the period of initial progression to disease. Some children have inadequate immune defenses which allow progression to disease rather than resolution.

Common patterns of involvement for children are hilar lymph node enlargement, pleural effusion, areas of acute pneumonia, and signs of bronchial obstruction due to the enlarged nodes compressing major bronchi.

Miliary and meningeal tuberculosis are prevalent sequelae in children who go untreated.

The principles of treatment for children are the same as for adults. Because of the common absence of parenchymal lung involvement, sputum smears and cultures are often negative. Conse-

quently, the x-ray and tuberculin test assume great importance, and treatment is often instituted on the results of these alone. The child often does not excrete bacilli and, therefore, is not infectious to others. If there are no adverse symptoms of disease, such children can immediately return to school and resume their usual activities.

In efforts to control tuberculosis, children assume great importance since testing of immediate contacts will usually identify the infectious source case.

Retreatment of Tuberculosis

Despite all efforts to assure that patients take their medicines, there will be some relapse due to their own negligence or to inappropriate regimens prescribed in the first place.

In patients undergoing retreatment, it is essential to obtain drug susceptibility studies. At the time of relapse, such information is not immediately available and cannot be obtained for at least eight weeks. After obtaining adequate sputum samples, and even before the results of susceptibility studies are known, it is best to place the patient on two drugs not previously used, plus isoniazid. The choice depends upon circumstances of the relapse and on information from the past.

The one important rule is that a single, new, potentially effective drug should never be added to a failed or failing regimen, as the organisms are very likely to develop resistance to it. Susceptibility patterns of the organisms should be learned as soon as possible and at least two effective drugs should be used.

Results of retreatment therapy are not as successful as initial therapy. Patient compliance and ability to take the medicines without serious toxic effects are most important requisites for success. Each time a treatment regimen fails, the chance of success decreases, thereby re-emphasizing the necessity for assurance of drug ingestion from the very start.

Other Mycobacterial Diseases

More than 20 species of mycobacteria other than *M. tuberculosis* have been identified. In the past, these other species have been referred to as atypical mycobacteria. They are now well classified, however, and should be referred to by their own names.

The niacin test is a reliable method by which these other mycobacteria can be differentiated

from the mammalian tubercle bacillus, the test being positive with the latter, negative with the other mycobacteria. Many of these mycobacteria are saprophytes in man and animals, with rare instances of true parasitic disease. Others cause skin diseases, and *M. kansasii* and *M. intracellulare* have been associated with significant pulmonary and other organ disease in man. Both demonstrate resistance in the laboratory to isoniazid and, in varying percentages, to some other drugs. Rifampin appears effective against both organisms. *M. kansasii* responds well to anti-tuberculosis chemotherapy without the use of surgery. *M. intercellulare* must be treated entirely differently from other forms of mycobacteria, with four to six drugs used in initial therapy, perhaps followed by surgery. Surgical resection of unilateral cavitary pulmonary disease, rarely utilized today in treatment of *M. tuberculosis* disease, can be of benefit in some patients with other mycobacterial disease which does not respond to chemotherapy.

The pattern of disease produced by these organisms is indistinguishable from mammalian human tuberculosis, a fact that places further importance on the proper identification of acid-fast organisms seen on sputum smear.

Summary

Tuberculosis, which is steadily declining in the United States, can now be very effectively treated with drugs. Many patients can be treated with little disruption in their daily lives.

The importance of faithfully ingesting the prescribed antituberculosis drugs for up to 18-24 months must be stressed. Much of the responsibility for assuring that patients act accordingly rests with the physician.

The physician's responsibility does not end with the patient. Contact investigation and appropriate preventive therapy for close associate reactors and children can help to break the chain of infection, disease, and further infection. The steady decline in the numbers of new cases can only be maintained by vigilance, prevention, and carefully applied therapy.

References

1. Riley, R. L., Mills, C. C., O'Grady, F., Sulton, L. U., Wittstadt, F., and Shivpuri, D. N. Infectiousness of air from a tuberculosis ward. *Am. Rev. Resp. Dis.* 85:511, 1962.
2. Stead, W. W. Pathogenesis of first episode of chronic pulmonary tuberculosis. *Am. Rev. Resp. Dis.* 95:729, 1967.
3. Landi, S., Held, H. R., and Tseng, M. C. Disparity of potency between stabilized and non-stabilized dilute tuberculin solutions. *Am. Rev. Resp. Dis.* 104:385, 1971.
4. Tuberculosis Programs 1972. U.S. Department of Health, Education and Welfare. Public Health Service, DHEW Publication No. (CDC) 74-8189, November, p. 1, 1973.
5. Kamat, S. R., Dawson, J. J. Y., Devadatta, S., Fox, W., Jonardhanam, B., Radhakrishna, S., Ramakrishnan, C. V., Somasundaram, P. R., Scott, H., and Velu, S. A controlled study of the influence of segregation of tuberculosis patients for one year on the attack rate of tuberculosis in a five-year period in close family contacts in South India. *Bull. W.H.O.* 34:517, 1966.
6. Gunnels, J. J., Bates, J. H., and Swindoll, H. Infectivity of sputum-positive tuberculosis patients on chemotherapy. *Am. Rev. Resp. Dis.* 109:323, 1974.
7. Loudon, R. G., and Spohn, S. K. Cough frequency and infectivity in patients with pulmonary tuberculosis. *Am. Rev. Resp. Dis.* 99:109, 1969.
8. Johnston, R. F., and Wildrick, K. H. The impact of chemotherapy on the care of patients with tuberculosis. *Am. Rev. Resp. Dis.* 109:636, 1974.
9. Fox, W. The John Barnwell Lecture. Changing concepts in the chemotherapy of pulmonary tuberculosis. *Am. Res. Resp. Dis.* 97:767, 1968.
10. East African/British Medical Research Councils: Controlled clinical trial of four short course (6 months) regimens of chemotherapy for treatment of pulmonary tuberculosis. *Lancet* 1:1332, 1973.
11. NIH Conference. Isoniazid Liver Injury: Clinical spectrum, pathology and probable pathogenesis. Mitchell, J. R., moderator. *Ann. Int. Med.* 84:181, 1976.
12. Doster, B., Murray, F. J., Newman, R., and Woolpert, S. F. Ethambutol in the initial treatment of pulmonary tuberculosis. *Am. Rev. Resp. Dis.* 107:177, 1973.
13. Byrd, R. B., Kaplan, P. D., and Greasy, D. R. Treatment of pulmonary tuberculosis. *Chest* 66:560, 1974.



GRAND ROUNDS



University of Louisville School of Medicine

This Journal feature will be presented alternately by the University of Louisville and the University of Kentucky Departments of Medicine and Departments of Surgery. We hope to have these features revolve around subjects of immediate practical interests to the practicing physician; and, for those of us not able to attend grand rounds in the teaching centers as often as we might, we hope this will represent a bit of a refresher course.

Pyloric Ulceration in an Intrathoracic Stomach: The Value of Preoperative Arteriography*

A patient treated for lye stricture in 1953 by esophagectomy and esophagogastrostomy recently presented with symptoms related to a recurrent gastric ulcer in the intrathoracic stomach. Findings disclosed by selective arteriography and endoscopy influenced the operative judgment.

Case Report

T.J., a 45-year-old white man was admitted to the medical service at the Louisville Veterans Hospital in February 1977 with complaints of retrosternal and left-sided chest pain usually related to eating. The pain typically lasted one half to one and a half hours. Antacids frequently decreased its intensity but nitroglycerin had no effect.

In October 1953 the patient had accidentally swallowed 3 - 4 oz of liquid lye. He was admitted to the Veterans Administration Hospital in Lincoln, Nebraska, and treated with tube feedings—initially through a nasogastric tube and later through a gastrostomy. Despite multiple esophageal dilatations, a severe stricture developed. In May 1954 a near total esophagectomy was performed through a left thoracotomy. After mobilization of the stomach through the abdomen, a esophagogastrostomy was performed through the left side of the neck. Pyloroplasty was not done. The patient did well until 1970 when he began to complain of dysphagia. At that time he had a stenosis of the cervical esophago-gastric anastomosis which admitted a 20 French dilator but could not be further enlarged by that method. At the Louisville Veterans Administration Hospital that year the patient had a Heineke-Mikulicz type esophagogastroplasty, widening the upper anastomosis. Initial good results were obtained and dysphagia has not recurred.

However, within six months following discharge from the hospital, the patient began to complain of chest pain associated with meals. Roentgenographic studies at various institutions in subsequent years disclosed a

gastric ulcer located chiefly along the greater curvature of the intrathoracic stomach in the antral area. Medical management with antacids and diet seemed to control the symptoms during hospitalization but was futile after the patient left the hospital. Weight loss of 20-25 lbs occurred over a several month period.

In February 1977 the patient was readmitted to the Louisville Veterans Administration Hospital. An upper gastrointestinal roentgenogram was noncontributory, but endoscopy disclosed an ulcer. The patient was again discharged on a medical regimen, but symptoms recurred, initiating the present admission.

Physical examination on admission showed a thin, middle-aged, white male with surgical scars on the abdomen and left sides of the chest and neck. The abdominal examination was normal, and the remainder of the physical examination was essentially noncontributory.

Hemoglobin and hematocrit values were 10.6 and 35.1 respectively. Serum electrolytes, BUN, creatinine clearance, blood glucose, liver function tests, and coagulation studies were normal. The serum iron level was decreased and serum iron binding capacity was elevated. The overnight 12-hour gastric analysis showed a pH of 7.0 and acid production of less than 0.5 meg/hr.

The electrocardiogram indicated a sinus bradycardia but no other changes were noted. Serial cardiac enzyme studies were normal. Chest roentgenogram revealed a double air shadow in the left side of the chest interpreted as the intrathoracic stomach. The upper gastrointestinal roentgenographic series disclosed an antral gastric ulcer (Fig. 1). Gallbladder and barium enema roentgenographic series were normal. At endoscopy the gastric ulcer was visualized; biopsy reports were interpreted as benign. The endoscope could not be passed into the duodenum because of the pyloric stricture. This had also been impossible in the admission in February 1977.

Roentgenographic studies and the operative record suggested that the pylorus was at the crural hiatus of the diaphragm. Considerable division of the arterial supply to the stomach had been associated with mobilization of the stomach. Splenectomy had not been performed with the original operation. An arteriogram of the thoracic

*From the Department of Surgery, University of Louisville School of Medicine, and the Surgical Service, Veterans Administration Hospital, Louisville, Kentucky.



FIG. 1—Distal antral gastric ulcer along greater curvature.

aorta and celiac axis was obtained. No blood supply could be demonstrated to the stomach from collaterals within the thorax even on late aortic blush views. Consequently, the sole blood supply to the stomach was the right gastroepiploic artery.

In August 1977 T.J. had a Heineke-Mikulicz pyloroplasty which required a one incision thoracoabdominal approach. The pylorus was very stenotic and the tip of the index finger was admitted with difficulty. There were no intraoperative or postoperative complications. Two weeks postoperatively an upper gastrointestinal barium roentgenographic study disclosed healing of the ulcer and adequate emptying of the stomach. Two months postoperatively the patient had no chest pain and his weight had increased by 15 lbs. For the first time in several years, he has been off of a multiple feeding post-gastrectomy diet. Close postoperative follow-up including endoscopy is contemplated.

Discussion

This patient represents a 24-year survival following a lye burn of the esophagus. Caustic burns of the esophagus are usually due to lye. Liquid caustic agents are much more likely to cause severe esophageal burns and subsequent strictures than solid flakes or pellets.⁴ Treatment of lye ingestion has been well reviewed by Kirsch and Ritter⁴ and Haller et al.³ Basically it includes hospitalization, nothing by mouth, intravenous

fluids, antibiotics, steroids, early esophagoscopy, and early roentgenographic contrast studies of the esophagus. Esophageal replacement⁶ is sometimes necessary, and good results are generally obtained. This patient has certainly benefited despite his recurrent difficulties.

Recurrent gastric ulcer is usually treated by surgical methods. Kukral⁵ in an excellent review lists the advantages of surgical therapy as opposed to medical therapy: a higher cure rate, decreased morbidity and mortality and an occasional cure of an early gastric cancer. The usual therapy for benign gastric ulcer is partial gastrectomy, and vagotomy may also be indicated if there is an associated duodenal ulcer. However, vagotomy and pyloroplasty have been used only to a limited extent, and reported series show recurrence rates of 2 to 38%.^{1,2,7}

The etiology of gastric ulcer is generally unknown but a relatively small percentage appear to be associated with distal obstruction. This patient had evident distal obstruction of a long duration. Studies indicate that there was a complete vagotomy as would have been anticipated from the previous surgery.

With these findings, and especially in view of the arterial supply of the stomach being from only the right gastroepiploic artery, the conservative operative approach of a pyloroplasty was selected and apparently was successful.

Summary

This patient represents a long-term survival after esophageal replacement for lye stricture. In recent years he has had recurrent gastric ulcers in the intrathoracic stomach probably related to progressive pyloric stenosis. Arteriography demonstrated that the intrathoracic stomach was nourished only by the right gastroepiploic artery. The conservative operative approach of pyloroplasty was employed with initial good results.

Rex A. Cox, M.D., Major, USAF, MC
Phil J. Harbrecht, M.D.
Waheed Ahmad, M.D.

The views expressed herein are those of the authors and do not necessarily reflect the opinion of the United States Air Force.

References

1. Daniels, H.A., and Strackan, A.: Gastric ulcer treated by vagotomy, pyloroplasty, and ulcerectomy. *Br. J. Surg.* 60:389, 1973.
2. Duthie, H.L., and Kwong, N.K.: Vagotomy or gastrectomy for gastric ulcer. *Br. Med. J.* 4:79, 1973.

(Continued on Page 599)



MATERNAL MORTALITY



From the Files of the KMA Maternal Mortality Study Committee

—Edited by John W. Greene, Jr., M.D.

This single, 23-year-old, white, gravida 1, para 0, weight 186 lbs., had an uncomplicated prenatal course. She was admitted to a 137-bed hospital at 5:15 a.m. on December 2, 1975. The patient had a normal sterile delivery with nitrous oxide anesthesia without complications. Both mother and infant left the delivery room in satisfactory condition. (Lab results: Hemoglobin and hematocrit were 12.4 and 36.1.)

The patient had received routine postpartum care, had ambulated, had a firm uterus and scant lochia, and was afebrile. The morning of December 5, 1975, on early morning rounds, the patient was afebrile but had a foul-smelling lochia; her uterus was firm; her abdomen was slightly tender; and her episiotomy was normal. The following orders were instituted: culture with sensitivity of the lochia was obtained, the patient was to be started on IV fluids, given Ampicillin, 500 mg., IV and aspirin as needed for pain and temperature. However, the patient while preparing for a

shower fell into bed. A code 900 was called and several physicians responded. Subsequent cardio-resuscitative measures were instituted, including eventually placing the patient on a pacemaker. However, all efforts at resuscitation were unsuccessful and the patient was pronounced dead at 10:00 a.m.

The cause of death was listed as cardiogenic shock, secondary to pulmonary embolism.

Comment

This case was ruled by the Maternal Mortality Committee to be a direct obstetric death with no preventable factors. The cause of death was felt to be pulmonary embolism. The Committee felt that this case demonstrated the need and value of early ambulation which may have been a factor in this case, although such ambulation may not have influenced the outcome. As stated previously, the incidence of such fatal emboli approaches 1/10,000 to 1/20,000 deliveries.

Deceased Kentucky Physicians

1977

| | |
|---------------------------------------|-------------------------------------|
| Benjamin F. Allen, Flemingsburg | John F. Knox, Stanton |
| Joseph H. Allen, Langley | Abraham W. Krupp, Louisville |
| *Henry B. Asman, Louisville | Carroll Henry Luhr, Jr., Louisville |
| Wm. Harvey Barnard, Elizabethtown | Max H. Marcum, Louisville |
| Malcolm L. Barnes, Louisville | George C. McClain, Benton |
| Harold B. Barton, Corbin | John W. Meredith, Scottsville |
| Charles Max Brand, Jr., Mt. Sterling | William R. Miner, Covington |
| Joe M. Bush, Mt. Sterling | C. P. Moseley, Paducah |
| Edward R. Cadden, Louisville | Vilas C. Moseley, Millersburg |
| Robert A. Clary, Louisville | Patrick R. O'Connor, Louisville |
| Andrew B. Colley, Owensboro | *Frank W. Oliphant, Cadiz |
| Victor P. Dalo, Louisville | James R. Peabody, Louisville |
| Richard E. Davis, Central City | Dagoberto J. Perez, Louisville |
| *Frederick E. DePriest, Harlan | C. Elliott Ray, Lexington |
| Frederick C. Ehrman, Louisville | Robert L. Reeves, Paducah |
| William McDaniel Ewing, Louisville | Robert C. Riggs, Lexington |
| Tyre Guy Forsee, Bardstown | Winston U. Rutledge, Louisville |
| Walter H. Griffing, Middlesboro | Grover B. Sanders, Louisville |
| John D. Handley, Hodgenville | Martin H. Skaggs, Taylorsville |
| James A. Holbrook, Louisville | Silas H. Starr, Louisville |
| Charles W. Justice, Jr., Ludlow | Livingston A. Wahle, Florence |
| Ronald Kaplan, Louisville | Emily S. Warfield, Lexington |
| Tibor Norbert Kende, Clearwater, Fla. | Thomas J. Wright, Stanford |
| | Charles F. Zerneckel, Frankfort |

List of names of deceased physicians available to The Journal as of November 15, 1977.
**Died November-December, 1976*



EDITORIAL



A Position to Defend

From a variety of sources there come on occasion statements that the contributions of medicine to the nation's health fall substantially short of expectation. Consider three recent reports.

Victor Cohn of the L. A. Times-Washington Post Service, as quoted in *The Courier Journal and Times*, August 28, 1977, writes: "Few gains made on raising cancer survival rates." In his appraisal of a National Cancer Institute Report, Mr. Cohn presents—as most of us appreciate—depressing survival rates for cancer of the lung, pancreas and stomach. Survival rates for breast cancer have improved only a few percent in the past 25 years. On the plus side, increased survival rates for bladder cancer, prostate cancer, some leukemias and Hodgkin's disease have been appreciated. Nonetheless, says Mr. Cohn, "Some authorities have been calling for a sharp shift in the federal emphasis—away from massive efforts in treatment . . . (and) are urging that more of cancer money be spent on trying to find ways to prevent cancer by changing diets and the environment."

Parallel in its emphasis is an article by Eric J. Cassell in the August 2, 1977, issue of the *Wall Street Journal* entitled "The Limits of Modern Medicine." The article is excerpted from a book written by the same author—*The Healer's Art*.

Mr. Cassell's thesis is that many of the recognized disease conquests of the past cannot be attributed to medicine alone, but in fact are more related to improved living conditions, including better nutrition and diminished crowding. Succinctly writes Mr. Cassell, "Apparently medical care alone, no matter how well delivered or technically complete, cannot be expected to lift the burden of sickness."

Perhaps the most pessimistic of recent comments comes from within the medical profession itself. It is that of a British physician, John Goundry, M.D., who, writing in the magazine *Pulse*, takes issue with ". . . the meddlesome science of geriatrics which stops us dying . . ." Doctor Goundry predicts that a death pill for the elderly will be available and perhaps mandatory within a few decades.

Any number of cogent arguments can be mustered in defense of medicine and its accomplishments. Apologetic rhetoric, however, will benefit no one. What is required is that both providers and consumers realize that maintenance of health demands responsible effort on the part of the individual, the community, and the medical profession.

GRS

December Message

But the souls of the just are in the hand of God, and no torment shall touch them. They seemed, in the view of the foolish, to be dead; and their passing away was judged an affliction and their going from us, utter destruction. But they are in peace. For if before men, indeed, they be punished, yet is their hope full of immortality; chastised a little, they shall be greatly blessed, because God tried them and found them worthy of himself. As gold in the furnace, he proved them, and as sacrificial offerings he took them to himself. In the time of their visitation they shall shine, and shall dart about as sparks through stubble; they shall judge nations and rule peoples, and the Lord shall be their King forever.

The Book of Wisdom
Chapter 3; 1-9

Thoughts on Serving as Regional Editor

When your own name appears on the masthead of *The Journal of The Kentucky Medical Association* it generates an almost indescribable feeling. Honor comes close to it. Yet the Association has bestowed honors before, membership, committee appointments, elections to office.

This seems something more than honor. Tradition is certainly a part of it; the tradition of people whose names topped that mast with distinction for many years, leaders such as Doctors Sam Overstreet, Henry Asman, Walter Hume, and most recently John Llewellyn. Their tradition was one of unrelenting service to medicine. To share their page is more than honor; it is a privilege and with that privilege comes an obligation to serve in their spirit.

The tradition of service to the patients the Lord has trusted to our care dates to the dawn of Medical History. Likewise *The Journal's* tradition of service to the Association and its members is reflected in the June 1903 issue of *The Journal* then the *Bulletin*, which proclaimed that "... the officers of the State Association are the Servants of the organization ... the *Bulletin* is its mouthpiece." A medical society functions best when it is helping physicians render the best possible care to their patients. The methods a State Association and its *Journal* use to help the physician and his patients could fill many editorials, but the target of *The Journal* was clear enough to the editors of that early issue. They

wrote, "if the mountain will not come to Mahomet, Mahomet must go to the mountain. The *Bulletin* . . . proposes . . . to keep on the trail of every regular practitioner in the state."

So, it is appropriate, as *The Journal* celebrates its diamond anniversary year, that it take a step of recommitment to the enduring qualities which have shone from its pages for almost three-quarters of a century. Appointment of additional editors broadens the scope of our service. Selecting editors from three widely spread areas is a step toward Mahomet. This was done in an effort to serve you, the Kentucky physician, more effectively.

The 1977 session of the House of Delegates is recorded in this issue. The delegates you selected have tried to present your ideas concerning the problems facing medicine. In the months before that House reconvenes the Board of Trustees will work to put those ideas into action, dozens of committees will meet, your AMA delegation will meet twice with the AMA House and monthly issues of *The Journal* will try to present an image of Kentucky medicine. You are an important part of that image and of the work of the Board, the committees, the AMA delegates, and this *Journal*.

We have tried to move several steps closer to you. In these weeks ahead, please tell us how we can represent and serve you better.

THOMAS L. HEAVERN, M.D.



ASSOCIATIONAL NEWS



House Urges Attendance At Boards of Health Mtgs.

The 1977 House of Delegates at its September meeting adopted a resolution concerning the involvement of physicians on local boards of health in Kentucky. The resolution, submitted by the Pennyriple Medical Society, was prompted by correspondence initiated by the KMA Committee on Community and Rural Health on this subject.

The Committee's actions were taken as a result of testimony received from the Bureau for Health Services regarding the Bureau's concern over the lack of quorums at county board of health meetings. In some cases inadequate attendance was due to the absence of physician board members. As a quorum is needed to make policy decisions on local boards of health, the state government has viewed this problem as an obstacle in carrying out the state's public health program. Reorganization of county boards of health is being suggested as a way to alleviate this problem and legislation may be introduced in 1978 to reduce to one the number of physicians serving on boards of health.

The Association has been instructed by the House to take all steps necessary to insure the current physician ratio on boards of health. However, it is essential for all physician members of county boards of health to remain actively involved. If you feel you can no longer serve in the capacity set forth, you should then resign your position in favor of another physician who can. It was voiced by members of the House that medicine must maintain a strong voice in the determination of health policies and programs at all levels of the health care system. Loss of input would be detrimental not only to organized medicine, but to the public as well.

Pedigo Fellowship Established By V. V. Cooke Foundation

The V. V. Cooke Foundation has initiated a George W. Pedigo Fellowship in Medicine at the University of Louisville School of Medicine. This will support investigative and scholarly work beyond usual residency years for an academician. An initial payment has been made on a pledge of \$25,000 toward building an endowment which will provide income support.

Doctor Pedigo has strongly supported the American College of Physicians, serving as Governor for Kentucky and most recently has been appointed to the Board of Regents. He has been a contributing member of the volunteer faculty of the U of L since 1946 and has served as President of the Jefferson County Medical Society, the Louisville and the Kentucky Society of

Internal Medicine, the Louisville and the Kentucky Heart Association chapters, and the Transylvania Medical Society.

Both the Cooke Foundation and the School of Medicine welcome additional support to this endowment in recognition of Doctor Pedigo.

Editor's Note: The Journal takes particular note of and commends the V. V. Cooke Foundation for its medical endowment. Creation of this fund to stimulate and support medical education reveals foresight on the part of those individuals responsible for administration of the Foundation. Under the direction of the University of Louisville, this endowment will generate benefits to faculty, students, and their patients over a wide area for years to come.



Members in the news

Specialty Groups Report New Officers

Kentucky Society of Allergy and Clinical Immunology: John M. Karibo, M.D., President; Martin Kaplan, M.D., President-Elect; and Ronald Moyer, M.D., Secretary-Treasurer.

Kentucky Chapter, American College of Emergency Physicians: John C. Sherman, M.D., President; Raymond Cohen, M.D., President-Elect; and Richard Braen, M.D., Secretary-Treasurer.

Kentucky Society for Plastic and Reconstructive Surgery, Inc.: Norman M. Cole, M.D., President; Morton L. Kasdan, M.D., President-Elect; Edward A. Luce, M.D., Vice-President; and Charles Kincaid, M.D., Secretary-Treasurer.

Kentucky Association of Public Health Physicians: Philip Weiler, M.D., President; W. E. Davis, M.D., Vice-President; and Linda S. Fagan, M.D., Secretary-Treasurer.

Dr. Pisacano Honored

Nicholas J. Pisacano, M.D., Lexington, was recently awarded the American Academy of Family Physician's Thomas W. Johnson Award for outstanding contribution to family practice education. Doctor Pisacano is Professor and Chairman of the Department of Allied Health, Education and Research at the University of Kentucky Medical Center. He was honored for his pioneer efforts

in formulating concepts of family practice and assistance in creating the American Board of Family Practice in 1969 of which he currently serves as Secretary and Executive Director.

SMA Appoints Dr. Overstreet

Robert Overstreet, M.D., Louisville, was recently appointed as Councilor from Kentucky to the Southern Medical Association. An internist, Doctor Overstreet has been a member of the SMA since 1965.

NEW MEMBERS

BARREN

Robert D. Fant, M.D.

BOONE

John H. Kuzman, M.D.

CAMPBELL-KENTON

Joseph A. Creevy, M.D.
Joseph F. Haas, M.D.
George E. Miller, M.D.

FAYETTE

James W. Baker, M.D.
Sherwood W. Barefoot, Jr., M.D.
William E. Blackburn, M.D.
Mary B. Cowles, M.D.
Stephen M. Cox, M.D.
Wendy G. Cropper, M.D.
Thomas J. Goodenow, M.D.
Vernon H. Humbert, Jr., M.D.
William Benjamin Kibler, M.D.
Michael B. Kurtz, M.D.
Sally S. Mattingly, M.D.
Harendra Nath, M.D.
Rosa K. Riggs, M.D.
Ronald J. Saykaly, M.D.
Thomas F. Wayne, Jr., M.D.
William B. Wheeler, M.D.
William A. Whittaker, Jr., M.D.

FRANKLIN

Richard N. Kepple, M.D.
Thomas W. Smith, M.D.

HOPKINS

David Gajadhar, M.D.

JEFFERSON

Kent Seitz, M.D.
Charles A. Waltz, M.D.

MADISON

James T. Coy, III, M.D.

McCRACKEN

Glen S. Chaney, M.D.

PULASKI

David L. Beaver, M.D.

SIMPSON

Joseph B. Grow, M.D.



Headquarters Activity

KMA had physicians and staff members in attendance at the following activities and events:

NOVEMBER

- 2 Drug Enforcement Agency Conference of Concerned Professionals, Louisville
- 3 Primary Care Association Meeting, Lexington
- 3-4 KMA representatives meeting with State officials re: Lab and Radiology Regulations, Frankfort
- 10 Executive Committee, Louisville
- Ad Hoc Committee on HSA's, Louisville
- 11-12 AMPAC Conference, Atlanta
- 14 *Journal* Editors' Meeting, Louisville
- Ad Hoc Committee on Primary Care, Louisville
- 15 Red Cross Board, Louisville
- 16 Committee on School Health, Physical Education and Medical Aspects of Sports Meeting, Louisville
- Cancer Committee, Louisville
- Medical Assistance Advisory Council, Frankfort
- 17 Scientific Program Committee, Louisville
- 18 Interspecialty Council, Louisville
- 30 Maternal and Child Care Committee, Louisville
- Emergency Medical Care Committee, Louisville
- State Legislative Activities Committee, Louisville
- National Legislative Activities Committee, Louisville

DECEMBER

- 2-5 Pre-Legislative Conference, Kentucky Lake State Park
- 3-7 AMA House of Delegates Interim Meeting, Chicago
- 6-8 State Board (FLEX) Medical Exams, Louisville
- 12 *Journal* Editors' Meeting, Louisville
- 14 McDowell House Board of Managers, Danville
- Judicial Council, Louisville
- Specialty Group Presidents, Louisville
- 14-15 Board of Trustees, Louisville
- 15 Committee on Membership and Placement Services, Louisville
- 23, 26 KMA Office Closed

JANUARY

- 2 KMA Office Closed
- 3 General Assembly Convenes, Frankfort
- 3-6 Professional Convention Managers Association, San Antonio

In Memoriam

WILLIAM R. MINER, M.D.
Covington
1896-1977

William Richard Miner, M.D., died during the month of September at the age of 80. A urologist, Doctor Miner was a 1927 graduate of Rush Medical College. He was an emeritus member of the Kentucky and American medical associations.

MAX H. MARCUM, M.D.
Louisville
1919-1977

Max Harding Marcum, M.D., 58, died on October 19. A 1944 graduate of the University of Louisville School of Medicine, Doctor Marcum practiced family medicine until his retirement earlier this year. He has belonged to the Jefferson County Medical Society, as well as the American and Kentucky medical associations.

CHARLES F. ZERNECHEL, M.D.
Frankfort
1940-1977

Charles F. Zernechel, M.D., 37, died on October 22 in an automobile accident. A radiologist on the staffs of the King's Daughters Memorial Hospital in Frankfort and the King's Daughters Hospital in Shelbyville, Doctor Zernechel was a graduate of Bowman-Gray School of Medicine. He belonged to the Kentucky Medical Association.

MARTIN H. SKAGGS, M.D.
Taylorsville
1899-1977

Martin Hascue Skaggs, M.D., died on October 24 at the age of 78. A 1929 graduate of the University of Tennessee Medical School, Doctor Skaggs received his M.Ph. from Johns Hopkins University. A charter Fellow of the Kentucky Chapter, American Academy of Family Physicians, he belonged to the Spencer County Medical Society, the Kentucky Medical Association, and the American Medical Association.

HAROLD B. BARTON, M.D.
Corbin
1926-1977

Harold Bryan Barton, M.D., died on November 6 at the age of 51. A 1952 graduate of the University of Louisville School of Medicine, Doctor Barton was Administrator of the Hillcrest Nursing Home and was First Vice-President of the Kentucky Association of Health Care Facilities.

A former KMA Vice-President, Doctor Barton had also served as Chairman of the KEMPAC Board of Directors and was Chairman of the KMA Committee

on Long Term Health Care in 1975-76. A Fellow of the American College of Surgeons, he had practiced general surgery in Corbin until his retirement in 1971. Doctor Barton was an active member of the Whitley County Medical Society, in addition to the Kentucky and American medical associations.

EDWARD R. CADDEN, SR., M.D.
Louisville
1909-1977

Edward Robert Cadden, Sr., M.D., Louisville, died on November 12 at the age of 68. A 1937 graduate of the University of Louisville School of Medicine, Doctor Cadden was a practicing obstetrician-gynecologist until his retirement in 1974. He had served on the faculty of the University of Louisville School of Medicine and had belonged to the Jefferson County Medical Society, and the Kentucky and American medical associations.

Pyloric Ulceration in Intrathoracic Stomach

(Continued from Page 592)

3. Haller, J.A., Jr., Andrews, H.G., White, J.J., et al.: Pathophysiology and management of acute corrosive burns of the esophagus: Results in 285 children. *J. Ped. Surg.* 6:578, 1971.

4. Kirsh, M.M., and Ritter, F.: Caustic ingestion and subsequent damage to the oropharyngeal and digestive passages. *Ann. Thor. Surg.* 21:74, 1976.

5. Kukral, J.C.: Gastric ulcer: An appraisal. *Surgery* 63: 1024, 1968.

6. May, I.A., and Sampson, P.C.: Esophageal reconstruction and replacements. *Ann. Thor. Surg.* 7:249, 1969.

7. Zahn, R.L., Stemmer, E.A., Hom, L.W., et al: Delayed recurrence of gastric ulcer following vagotomy and drainage procedures. *Am. Surg.* 34:757, 1968.

THE NEW ORLEANS GRADUATE MEDICAL ASSEMBLY

41ST ANNUAL SESSION

March 31-April 4, 1978

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| INITIAL PREMIUM | FIRST RENEWAL PREMIUM DUE DATE | RENEWAL TERM | INITIAL RENEWAL SUM | INITIAL RENEWAL PERIOD |
|----------------------|--------------------------------|--------------|---------------------|------------------------|
| Initial Premium \$ | | | | |
| Renewal Premiums: | | | | |
| Through age 40 \$ | | | | |
| Age 41 through 69 \$ | | | | |
| Beneficiary | | | | |
| Relationship | | | | |

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- (2) After the insured reaches his 70th birthday;
- (3) When the insured refuses or ceases to be actively engaged in the duties of his profession or occupation as set by reason of disability covered under the terms of this policy;
- (4) When the insured ceases to be a member of the group or association named above;
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The Robert C. McChord Memorial Meeting of The Kentucky Medical Association

Ramada Inn, Bluegrass Convention Center, Louisville, Kentucky, September 27-29, 1977

Digest* of Proceedings of the Regular Sessions of the HOUSE OF DELEGATES

Carl Cooper, Jr., M.D., Bedford

Speaker of the House, Presiding

First Session

Speaker Cooper called the 127th Meeting of the KMA House of Delegates to order at 9:10 a.m. and asked John M. Baird, M.D., Danville, to give the invocation. He then called on Don E. Cloys, M.D., Richmond, Chairman of the Credentials Committee, to give the report of the Credentials Committee. Doctor Cloys reported that a quorum was present. A motion was made, seconded, and passed that the Minutes of the 1976 session of the House of Delegates be approved as published in the December, 1976, *Journal of the Kentucky Medical Association*.

S. Randolph Scheen, M.D., Louisville, KMA Secretary-Treasurer, gave several announcements. He noted that every member of the House, as well as officers, trustees, and committee members of KMA, were covered by a \$50,000 accident insurance policy upon leaving their residence to perform official duties for the Association. He announced that scientific sessions would begin at 8:50 a.m. Tuesday in the Convention Center; and stressed that the highlight of the Annual Meeting, the President's Luncheon, would take place in the Convention Center on Wednesday at 11:50 a.m. The Secretary-Treasurer reminded the Delegates that the Nominating Committee for general offices would meet at the close of the first session of the House, and Reference Committees would convene at 2:00 p.m. Monday in various rooms of the Convention Center.

He reported that the Board of Trustees, in its meeting the previous day, had voted to open the

Reference Committee meetings to the press for this year only. He stated the Message Center would again be in operation throughout the Annual Meeting, and emphasized the importance of visiting the technical and scientific exhibits.

Doctor Scheen read a list of member physicians who had died since the 1976 meeting of the House of Delegates, following which the members of the House stood for a moment of silent tribute. The names of the physicians, their locations, and dates of death are as follows:

| | | |
|-----------------------------|------------------|--------------------|
| Allen, Benjamin Franklin | Flemingsburg | May 27, 1977 |
| Atkinson, William Burr | Campbellsville | September 8, 1976 |
| Asman, Henry Bernard | Louisville | December 21, 1976 |
| Baer, Louis | Louisville | September 29, 1976 |
| Barnard, William Harvey | Elizabethtown | August 27, 1977 |
| Barnes, Kenneth Lee | Princeton | October, 1976 |
| Barnes, Malcolm Lynn | Louisville | April 9, 1977 |
| Brand, Charles Max, Jr. | Mt. Sterling | 1977 |
| Bush, Joe Milbert | Mt. Sterling | February 21, 1977 |
| Clary, Robert A. | Louisville | January 20, 1977 |
| Colley, Andrew Butler | Owensboro | June 1977 |
| Crawford, Paul Miller | Louisville | October 15, 1976 |
| Dalo, Victor Paul | Louisville | July 2, 1977 |
| Davis, Richard Elmer | Central City | August 24, 1977 |
| DePriest, Frederick E. | Harlan | November 1976 |
| Ehrman, Frederick Charles | Louisville | May 1977 |
| Ewing, William McDaniel | Louisville | July 16, 1977 |
| Forsee, Tyre Guy | Bardstown | April 26, 1977 |
| Griffing, Waller Hurd | Bowling Green | August 23, 1977 |
| Handley, John Daniel | Hodgenville | March 8, 1977 |
| Kaplan, Ronald | Louisville | February 18, 1977 |
| Kende, Tibor Norbert | Clearwater, Fla. | May 1, 1977 |
| Knox, John F. | Stanton | June 1977 |
| Krupp, Abraham W. | Louisville | June 1, 1977 |
| Luhr, Carroll Henry, Jr. | Louisville | February 27, 1977 |
| McClain, George Clay | Benton | April 26, 1977 |
| Meredith, John Wooten | Scottsville | January 28, 1977 |
| Moseley, Vilas Clay | Millersburg | March 16, 1977 |
| O'Connor, Patrick R. | Louisville | April 23, 1977 |
| Olipphant, Frank W. | Cadiz | November 7, 1976 |
| Peabody, James R. | Louisville | August 17, 1977 |
| Perez, Dagoberto J. | Louisville | January 23, 1977 |
| Ray, C. Elliott | Lexington | April 1, 1977 |
| Reeves, Robert L. | Paducah | March 24, 1977 |
| Richardson, Josephine A. W. | Louisville | October 9, 1976 |
| Riggs, Robert Caleb | Lexington | July 1977 |
| Rutledge, Winston Underwood | Louisville | June 14, 1977 |
| Sanders, Grover B. | Louisville | August 31, 1977 |
| Starr, Silas H. | Louisville | January 31, 1977 |
| Wahle, Livingston Augustus | Wood, Wisconsin | May 3, 1977 |
| Warfield, Emily Sturgis | Lexington | January 10, 1977 |
| Wheeler, Warren E. | Lexington | October 23, 1976 |

Following the In Memoriam, Doctor Parks introduced the President of the American Medical Association, John H. Budd, M.D., of Cleveland, Ohio. Doctor Budd briefly addressed the House concerning AMA's stand on "national health insurance," steps that can be taken to improve

*Editorial Note: A tape recording was made of the two sessions of the House of Delegates, and any member who desires to examine the transcript of these proceedings may visit the Headquarters Office and listen to the recording.

the image of the profession and the AMA, and other pertinent matters.

Doctor Cooper thanked Doctor Budd for his remarks, and reported to the House that Hoyt D. Gardner, M.D., Kentucky's representative on the AMA Board of Trustees, had been asked to seek the position of AMA President-Elect. Doctor Gardner made several comments regarding the campaign that would soon be underway.

Doctor Cooper announced the Reference Committee appointments as follows:

Reference Committee No. 1

Robert E. Smith, M.D., Covington, Chairman
Walter R. Brewer, M.D., Lexington
Peter C. Campbell, M.D., Louisville
Elmer H. Jackson, M.D., Danville
W. N. Richardson, M.D., Cadiz

Reference Committee No. 2

Peter P. Bosomworth, M.D., Lexington, Chairman
Richard K. Jelsma, M.D., Louisville
W. E. Kozee, M.D., Ashland
William E. Pearson, M.D., Owensboro
R. D. Pitman, M.D., Williamsburg

Reference Committee No. 3

James A. Baumgarten, M.D., Owensboro, Chairman
Thomas M. Marshall, M.D., Louisville
W. Grady Stumbo, M.D., Prestonsburg
Raymond J. Timmerman, M.D., Ft. Thomas
John E. Trevey, M.D., Lexington

Reference Committee No. 4

Glenn W. Bryant, M.D., Louisville, Chairman
Allen E. Grimes, Jr., M.D., Lexington
Marshall R. Johnson, M.D., Elizabethtown
Joseph H. Rapier, Jr., M.D., Paintsville
N. H. Talley, M.D., Princeton

Reference Committee No. 5

Charles C. Smith, Jr., M.D., Louisville, Chairman
J. L. Becknell, M.D., Manchester
Danny M. Clark, M.D., Somerset
John E. Downing, M.D., Bowling Green
C. Douglas LeNeave, M.D., Mayfield

Reference Committee No. 6

Wally O. Montgomery, M.D., Paducah, Chairman
Michael B. Flynn, M.D., Louisville
Charles D. Franks, M.D., Morehead
Cecil D. Martin, M.D., Carrollton
Fred A. Stine, M.D., Highland Heights

Doctor Cooper announced that the tellers for both sessions would be P. Raphael Caffrey, M.D., Lexington, Chairman; Linda S. Fagan, M.D., Richmond; Robert L. McKenney, M.D., Falmouth; and N. H. Talley, M.D., Princeton.

Doctor Cooper then introduced Rex E. Kenyon, M.D. of Oklahoma City, Chairman of the AMPAC Board of Directors, who made several brief remarks.

After Doctor Kenyon's remarks, Doctor Parks thanked the members of the House for the opportunity of serving them as the President of KMA, and stated that he appreciated their cooperation and consideration throughout his term.

He then presented the 1977 Faculty Scientific Achievement Awards to the University of Louisville recipient, Thomas B. Calhoon, Ph.D., and the University of Kentucky recipient, William R. Markesbery, M.D.

At 10:15 a.m., the Kentucky State Association of Medical Assistants served coffee and sweet rolls to the members of the House in the lobby of the Ramada Inn.

Following the short break, the Speaker announced that neither of the presidents of the American Medical Student Association Chapters in Kentucky were present to give an oral report to the House, although both had been invited.

The reports of the officers and committees were presented by the Speaker and referred to a Reference Committee as follows: (Only the reports of the officers were read.)

Report of the President was referred to Reference Committee No. 1 with the following exceptions: the entire section numbered Topic II—Continuing Medical Education, was referred to Reference Committee No. 2; the entire section numbered Topic III—Medicare-Medicaid Reimbursement, was referred to Reference Committee No. 5; the entire section numbered Topic IV—Liability Insurance, was referred to Reference Committee No. 3; the entire section numbered Topic V—National Health Insurance, was referred to Reference Committee No. 3; and the entire section numbered Topic VII—Health Care Costs, was referred to Reference Committee No. 4

Report of the President, Auxiliary to KMA—Reference Committee No. 1

Report of the President-Elect—Reference Committee No. 1

Report of the Speaker of the House—Reference Committee No. 1

Report of the Chairman, Board of Trustees—Reference Committee No. 1 with the following exceptions: Special Report A—Medicare, was referred to Reference Committee No. 5; Special Report B—Liability Insurance, was referred to Reference Committee No. 3; and Special Report C—Continuing Medical Education, was referred to Reference Committee No. 2

Report of the Secretary-Treasurer—Reference Committee No. 1

Report of the Editor—Reference Committee No. 1

Report of the Delegates to AMA—Reference Committee No. 1

Report of the Executive Vice President—Reference Committee No. 1

Report of the Judicial Council—Reference Committee No. 6

Report of the Rural Kentucky Medical Scholarship Fund—Reference Committee No. 6

Report of the Board of Directors, Kentucky Blue Cross and Blue Shield—Reference Committee No. 4

Report of the Scientific Program Committee—Reference Committee No. 2

Report of the Scientific Exhibits Committee—Reference Committee No. 2

Report of the Continuing Medical Education Committee—Reference Committee No. 2

Report of the Cancer Committee—Reference Committee No. 2

Report of the Maternal Mortality Study Committee—Reference Committee No. 3

Report of the Committee on Mental Health—Mental Retardation—Reference Committee No. 5

Report of the Hospital Committee—Reference Committee No. 2

Report of the Advisory Committee to Blue Cross and Blue Shield—Reference Committee No. 4

Report of the Committee on Occupational Health and Environmental Quality—Reference Committee No. 3

Report of the Physician-Attorney Liaison Committee—Reference Committee No. 6

Report of the KMA-Kentucky Nurses Association Joint Practice Committee—Reference Committee No. 6

Report of the Claims and Utilization Review Committee—Reference Committee No. 4

Report of the Committee on National Legislative Activities—Reference Committee No. 3

Report of the Committee on State Legislative Activities—Reference Committee No. 3

Report of the Committee on Medicare and Other Governmental Medical Programs—Reference Committee No. 5

Report of the Technical Advisory Committee on Physician Services (Title XIX)—Reference Committee No. 5

Report of the Advisory Committee to Selective Service—Reference Committee No. 5

Report of the Advisory Committee to KMA Auxiliary—Reference Committee No. 1

Report of the Committee on Community and Rural Health—Reference Committee No. 4

Report of the Committee on School Health, Physical Education, and Medical Aspects of Sports—Reference Committee No. 4

Report of the Emergency Medical Care Committee—Reference Committee No. 2

Report of the Committee on Health Care Costs—Reference Committee No. 4

Report of the Interspecialty Council—Reference Committee No. 2

Report of the Committee on Physicians' Health—Reference Committee No. 3

Report of the Committee to Study the Constitution and Bylaws—Reference Committee No. 6

Report of the McDowell House Board of Managers—Reference Committee No. 6

Report of the KMA Advisory Committee to KPRO—Reference Committee No. 4

Report of the Committee on Maternal and Child Health—Reference Committee No. 3

New Business

New business was presented to the House by the Vice-Speaker and referred to the Reference

Committee indicated:

(A) Resolution from Warren County Medical Society concerning Radiologic Operators Regulations—Reference Committee No. 3

(B) Resolution from Garrard County Medical Society concerning Department for Human Resources Regulation 902-KAR-105-040 Radiology Operation Certification—Reference Committee No. 3

(C) Resolution from Jefferson County Medical Society concerning Medicaid Program in Kentucky—Reference Committee No. 5

(D) Resolution from Jefferson County Medical Society—Reference Committee No. 3

(E) Resolution from Jefferson County Medical Society concerning Patients' Compensation Fund, KMA Insurance Company—Reference Committee No. 3

(F) Resolution from Jefferson County Medical Society concerning Full Disclosure by Insurance Companies—Reference Committee No. 3

(G) Resolution from Fayette County Medical Society concerning Disclosure of Federal Reimbursements to all Contractors—Reference Committee No. 5

(H) Resolution from Leslie County Medical Society concerning Medicaid Reimbursement for Nurse Midwives—Reference Committee No. 5

(I) Resolution from W. Grady Stumbo, M.D., concerning Physician Laboratories—Reference Committee No. 3

(J) Resolution from Campbell-Kenton County Medical Society concerning Health Insurance Information—Reference Committee No. 4

(K) Resolution from Campbell-Kenton County Medical Society concerning Blue Shield Usual, Customary, and Reasonable Policies—Reference Committee No. 4

(L) Resolution from Campbell-Kenton County Medical Society concerning Privileges of AMA Alternate Delegates—Reference Committee No. 6

(M) Resolution from Campbell-Kenton County Medical Society concerning Provision for AMA Referenda—Reference Committee No. 6

(N) Resolution from Pennyryle Medical Association concerning Laboratory Regulations Pursuant to K.R.S. 333—Reference Committee No. 3

(O) Resolution from Pennyryle Medical Association concerning Physician Members on Local Boards of Health in Kentucky—Reference Committee No. 3

(P) Resolution from Pennyryle Medical Association concerning The Publication Entitled, "Hospital Regulation: A Report of the Special Committee on the Regulatory Process," Published by the American Hospital Association, 1977—Reference Committee No. 2

(Q) Resolution from KMA Board of Trustees concerning Kentucky Medical Insurance Company—Reference Committee No. 3

(R) Resolution from KMA Board of Trustees concerning Institutional Control of University Hospitals—Reference Committee No. 2

Vice-Speaker Crowder announced the meeting places for the Nominating Committee for general officers and the trustee districts electing trustees and alternates. He stated that the Nominating Committee would report at the close of the first scientific session on Tuesday morning, as

well as at the second meeting of the House on Wednesday evening. The physicians on the Nominating Committee were named as follows: William N. Richardson, M.D., Cadiz, Chairman; Walter R. Brewer, M.D., Lexington; Danny M. Clark, M.D., Somerset; Elmer H. Jackson, M.D., Danville; and Paul J. Sides, M.D., Lancaster.

Doctor Crowder also pointed out that a synopsis of the rules of parliamentary procedure was contained in each Delegate's background material.

The meeting was adjourned at 11:10 a.m.

Second Session

Speaker Cooper called the second session of the House of Delegates to order at 6:10 p.m. on September 28, 1977 and the invocation was given by Paul J. Parks, M.D., Bowling Green. Doctor Cloys reported a quorum was present.

Doctor Holloway, as Chairman of the Board, was recognized to present the final report of the Board. He read the following Resolution which was passed by the Board at its September 28 meeting, and moved for its adoption.

WHEREAS, the 1977 KMA Annual Meeting has made a substantial contribution in the field of continuing medical education and has been well received, and

WHEREAS, many individuals, organizations, and agencies, including guests, state essayists, scientific and technical exhibitors, newspapers, radio and television stations, the Ramada Inn and the Bluegrass Convention Center have contributed to its success, therefore be it

RESOLVED, that this House of Delegates go on record of expressing its deepest appreciation to all individuals and organizations who have had a part in the development and implementation of the 1977 Annual Meeting.

Doctor Holloway then read a short Resolution endorsing the candidacy of Hoyt D. Gardner, M.D., for the office of AMA President-Elect., and moved its adoption. The motion was seconded from the floor and carried.

Doctor Scheen was then called to the podium for announcements and recognition of guests from neighboring state medical associations who had attended KMA's Annual Meeting. Included were: John W. Beeler, M.D., President of the Indiana State Medical Association; Robert D. Hess, M.D., President-Elect of the West Virginia State Medical Association; and William J. Hagood, Jr., M.D., President-Elect of the Medical Society of Virginia.

Upon question from the floor concerning the Liability Insurance Assessment Fund, Chairman

Holloway read the same prepared statement he had presented to both Reference Committee No. 1 and Reference Committee No. 3 on the breakdown of the expenditures from the Fund.

Doctor Holloway then read the following Resolution, (Resolution S) which had been adopted by the Board at its Wednesday meeting. He moved for its adoption and implementation by the House; the motion was seconded from the floor and carried.

WHEREAS, P.L. 94-484 is the law of the land, and

WHEREAS, this law intrudes on the basic right of states in their public and private universities by dictating admissions policies to medical schools, and

WHEREAS, this law will assign out-of-state American citizens who have secured two plus years of education at a foreign medical school to our medical schools causing further crowding without fully funding the costs, and

WHEREAS, the financial support of our Kentucky students has been freely accepted by this Commonwealth, and

WHEREAS, failure to accept these students will result in loss of Federal support (capitation) given for previous increases in class size, and

WHEREAS, many state and private schools have already served notice they will retain discretion in admission of students even at the penalty of foregoing this Federal support, now therefore be it

RESOLVED that the KMA strongly encourage our state medical schools and Council on Higher Education to resist this intrusion in admission policies and provide replacement funds to meet this deficit should this Federal support be withheld.

Following Doctor Cooper's announcement that Reference Committee reports would be read next, a motion was made, seconded, and passed that the Committee Chairmen dispense with the reading of the summary at the beginning of each report which lists the Resolutions and committee reports considered by each Reference Committee.

REFERENCE COMMITTEE NO. 1*

*Robert E. Smith, M.D., Covington
Chairman*

Reference Committee No. 1 considered the following reports:

1. Report of the President, with the following exceptions:

**In order to make the Digest of Proceedings of the second meeting of the House of Delegates more understandable and because it will occupy less space in The Journal, the KMA Board of Trustees passed the following motion several years ago: "that if no dissenting action on the Committee's recommendations is made either by the Committee or the KMA Board of Trustees, only the Reference Committee action on the report be printed in The Journal."*

The entire section numbered Topic II—Continuing Medical Education, beginning on Page 1.3 and ending on Page 1.4—referred to Reference Committee No. 2

The entire section numbered Topic III—Medicare-Medicaid Reimbursement, on Page 1.4—referred to Reference Committee No. 5

The entire section numbered Topic IV—Liability Insurance, beginning on Page 1.4 and ending on Page 1.5—referred to Reference Committee No. 3

The entire section numbered Topic V—National Health Insurance, beginning on Page 1.5 and ending on Page 1.6—referred to Reference Committee No. 3

The entire section numbered Topic VII—Health Care Costs, beginning on Page 1.6 and ending on Page 1.7—referred to Reference Committee No. 4

2. Report of the President, Auxiliary to KMA

3. Report of the President-Elect

4. Report of Speaker of the House

5. Report of the Chairman, Board of Trustees, with the following exceptions:

Special Report A—Medicare—referred to Reference Committee No. 5

Special Report B—Liability Insurance—referred to Reference Committee No. 3

Special Report C—Continuing Medical Education—referred to Reference Committee No. 2

6. Report of the Secretary-Treasurer

7. Report of the Editor

8. Report of the Delegates to AMA

9. Report of the Executive Vice President

30. Report of the Advisory Committee to the KMA Auxiliary

Report of the President

I consider this report to the House of Delegates as a report also to all KMA members, and the remarks hopefully will be read by every member. Not so because of any great wisdom or depth of thought on my part, but to let you know of the activities of the President on behalf of KMA members, and perhaps to occasionally touch on some of my philosophy regarding participation of all physicians in the socioeconomics of medicine. All of us were trained to be practicing or teaching physicians, interested primarily in the medical needs or physical health of our patients, and I hope this remains foremost in our day-to-day activity. However, all of us realize that many things affect the health of our patients besides physical disease.

The primary purpose of organized medicine is the education of physicians and the dissemination of knowledge gained into practice for the good of all our patients. If we continue to believe in this purpose we will be a strong, viable group which will remain forever a respected profession. To maintain this respect and to provide service to our patients, there are many things we must do that we were never taught in medical school, and that is one of the reasons for our medical organization.

My interpretation of the role of president is that the office is one of leadership and service; leadership in promoting those things that seem good for all of the

profession, and service in carrying out the established policies of the Association. Therefore, I have not tried to force my opinions on anyone in the Association or start new programs that have not been discussed and voted upon by the House of Delegates. Sometimes my impressions and desires have been different than those expressed by the House, but those differences have not been allowed to prevent me from carrying out the expressed wishes of the membership.

In implementing House of Delegates' actions, the officers and trustees are not infrequently targets of criticism from some members of the organization. I have evaluated all such critical contacts and have tried to respond to all of them. I do not mind criticism, especially when it is constructive, but this has rarely been the case this year. I am sure that future presidents, like I, would feel better about criticism if it were accompanied by a suggestion as to a more constructive and generally acceptable solution to the criticized problem.

When I took office as your spokesman last year, I did so with some question as to directives you had given the Association. You voted by a narrow margin for mandatory membership of KMA members in AMA. By a slim margin, you voted to rescind previous policy on continuing medical education. The designation of Kentucky as a single state area for purposes of Medicare reimbursement was asked for by a difference of only a few votes. These were appropriate expressions of your wishes by the democratic process, but left me (and many others) with the feeling we were not, as a total organization, very well committed on these subjects. These misgivings are still present with me. Majority rules in the conduct of our proceedings, but it does not necessarily once and for all settle an issue.

Topic 1. KMA and AMA Membership

I, personally, have not and do not support mandatory membership in any organization. I like a voluntary system. I do like to see every person who profits from an organization participate in that organization through membership and honest effort to understand the workings of the organization and its goals. There is no doubt in my mind that all physicians reap benefits of organized medicine and for that reason I would urge 100% membership—but not on a mandatory basis. If members do not see any advantages to membership, let them study what organized medicine is attempting to do for them in the areas of liability insurance, modifying state and national legislation that threatens to enslave us, providing continuing education programs, going to court for us against Federal Trade Commission complaints, Health Planning Acts, federal manipulation of drug costs, generic drug prescribing, and many others.

Organized medicine through donations from individual members, Auxiliary, friends, and other organizations provides thousands of dollars every year to help the medical student finance his education. This helps all of us, since it makes the obtaining of the medical degree a little less burdensome financially and allows the student to give full time to his studies. It also helps some students (who will make excellent physicians) pursue their medical careers when they might not have been able to do so without this financial aid. The Auxiliary to KMA has been very active in this phase of medical education and is to be congratulated for its fine work.

This makes it even more important that students and residents become active in organized medicine, and I would encourage them to do so.

I believe any and all of these reasons make membership in organized medicine well worthwhile and I encourage you to voluntarily join me in membership and support of your local, state, and national organizations.

Topic VI. Auxiliary to KMA

The continued participation of the ladies in various phases of the KMA is commended and encouraged. They have helped on the local, state, and national scenes in the elective process; they have developed numerous projects to make money for support of the AMA-ERF Program and have presented handsome checks to both of the medical schools to show the results of their labors. Perhaps our appropriate request of them for the coming year is to urge the physician member of the family to be more involved in all phases of organized medicine. Thank you, ladies, for a very fine job.

Topic VIII. Officers, Committees, and Staff

I want to close my remarks by praising a very fine group of KMA officers. The President-Elect, the Vice-President, the Chairman of the Board of Trustees, the individual Board members, the Delegates and Alternates to AMA, the Speaker of the House, and many others have been a tremendous asset to the office of President this year and are recipients of my deepest gratitude. All have gone the extra mile and have given time, energy, and money more often than you can ever guess to make KMA a working, viable organization. Thanks to one and all.

Many of you probably give little thought to the work of the various committees of KMA that meet regularly to carry out your policies or to formulate new ones for you to evaluate. They travel many miles, uncompensated financially, read many reports, and do excellent work for all of us.

For those of you who are officers, committee persons, callers, or those who drop into the KMA office now and then, my extolling the virtues of the staff is understandable. But to those of you who have no contact with them, accept my word that they are all the very finest. From the Executive Vice President to the secretarial staff to the typesetters—each has done a superb job. Countless hours, both day and night, are put in by these people to help us and make us more effective. There is no job description that covers all their duties, whether in the office, at a late-night committee meeting, on the road to testify at some legislative hearing, at a convention in some other state, or at the Annual Meeting. They deserve the highest praise from all of us and especially from me.

There are many other aspects of our organizational life that deserve discussion, but time and space do not permit. If I can have any influence at all on you, let it be to encourage you to not only practice the best medicine you are qualified to practice, but also to keep improving on that by updating your education regularly. Interspersed with this, take time to know your KMA and give time and work to make it better. Don't listen to and give destructive criticism until you have evalu-

ated it, and then give constructive thoughts to your leaders for making adjustments and improvements. In so doing we can continue under the free enterprise system and can give our best to our profession.

Thank all of you for your support and your good wishes for your encouragement, for your friendship, and for promoting medicine at your local levels.

Paul J. Parks, M.D., President

Recommendations, Reference Committee No. 1

Reference Committee No. 1 first reviewed the Report of the President, with the exception of Topics II, III, IV, V, and VII. The Committee notes specifically that Doctor Parks, despite the lack of clear mandate from the House, by diplomacy and perseverance, was capable of maintaining the unity of the Association. We wish to commend him highly for a job well done. The Committee recommends acceptance of those sections of the Report which we reviewed.

Mr. Speaker, I move the adoption of this section of the report.

(The motion was seconded and carried.)

Report of the President, Auxiliary to KMA

"Something for Everyone" has been the theme for the Auxiliary year 1976-1977. This has proven true for the total membership. After voting a dues raise at Convention 1975-1976, our total membership has stayed over 1400 with a final total of 1412.

Three member-at-large meetings were held in two districts to explain the Auxiliary function and to encourage their membership and support. As a result of such meetings, we have a reorganized county, Madison, which brings our total to 29 counties. They received their charter at Spring Board meeting. Various counties attending board brought gifts to welcome our new "baby."

Communication is always a key factor for information to all Auxiliary members. This is accomplished by the President's Newsletter, and four issues of the *Blue Grass News*. Newsletters go to county presidents, presidents-elect, state chairmen, executive committee, national headquarters, and KMA advisors. All information is then passed on to the county members. *The KMA Journal* allows the Auxiliary a page four times a year to help further educate the medical family of Auxiliary functions. Our annual directory is given to all county presidents and state committee members at convention. MAL's receive this directory when they join along with other Auxiliary information and a letter from the President.

Board meetings were held during convention, in November with Campbell-Kenton being host; and in spring with Laurel and Whitley being host. It was suggested at Fall Board by the Long-Range Planning Committee that the Auxiliary change its annual convention from fall to spring to keep in step with the counties and National changing officers. Also, our projects would begin on time instead of after the September meeting. This was presented to the KMA Board in December and they gave full support to the proposed change. Fall Board would remain in September in conjunction with the

KMA convention. The Auxiliary convention will be held in or near the home city of the President-Elect. This will involve more members around the state and help develop stronger ties with Auxiliary. The officers installed at convention 1977 will remain in office until spring of 1978. Officers elected in spring of 1978 will stay in office for the full year of 1978-79. These proposed changes came from several meetings of the Long-Range Planning Committee.

At this time these are proposed changes and will be voted on September 27, 1977, at the House of Delegates.

Checks from AMA-ERF donations were presented to Doctor D. Kay Clawson, Dean of the University of Kentucky Medical School for \$6,154.80, and Doctor Arthur Keeney, Dean of the University of Louisville Medical School for \$10,888.39. The total amount that the National Auxiliary presented to AMA during convention 1977 was \$1,512,612.18. This total is a combination of Auxiliary donations and physician donations.

The Auxiliary was presented a framed certificate in the spring by the Kidney Foundation of Central Kentucky. This was to show their appreciation for many Auxiliary members around the state giving talks on the Phoenix Project. Phoenix Project is a presentation to encourage the public to sign their drivers license for the donation of their kidneys or eyes to help another person after their death. We are very proud that so many of our members have participated in this worthwhile endeavor.

The Auxiliary has a state loan fund that lends money to students seeking a career in health related fields. Also, many individual counties have loan funds. On the state level, there have been some problems encountered with a few students not repaying their loans. The Committee met with an advisor from KMA to update the contract. This spring a personal interview with the student was required. They must sign a personal note in addition to the contract. First-year students of a four-year program do not qualify for the loan. Upon completion of their first year, we will accept their application. This is an interest free loan unless the student drops out of school. If they do not complete school, the loan is to be repaid at an interest rate specified when the contract is written. This is an ongoing fund and the only donation it receives is a \$1.00 per member donation annually. As you see, we cannot afford to have students not repay their loans.

With the change in our name last year from Woman's Auxiliary to the Kentucky Medical Association to Auxiliary to the Kentucky Medical Association, our President and President-Elect pins had to be redesigned. It was decided that the original gavel, original pin, and the two retired pins should be framed in a shadow box. These are in our office at the KMA building.

Fayette County's work in conjunction with churches and civic organizations with the promotion of fire decals put in windows in homes and apartment buildings has been sent to the National Safety Council. These decals are placed in a window of a room where a child, invalid, or retarded person sleeps. This enables the firemen to get such people out first. These decals are highly visible during the day and reflective from a light source at night. In apartment buildings it is recommended that

the decals be placed on interior front doors plus bedroom doors.

At the convention on Monday, September 26, at 1:00 p.m. there will be a slide presentation by Doctor Fred Alsop, Assistant Professor of Biology at East Tennessee State University. He is a professional wildlife photographer. All members, spouses and guests are invited to this presentation in the Jeffersonian Room of the Ramada. Doctor Alsop will be in the hospitality suite during the convention to answer any questions. On Tuesday morning, the 27th at 7:30 to 8:45 a.m. members of KMA, AKMA, and KMA staff are invited to a continental breakfast poolside. Reservations are required. On Wednesday evening from 4:30 to 6:00 p.m. a potluck dinner will be served in the hospitality suite to delegates and spouses of KMA, the early time being due to the House of Delegates convening at 6:00 p.m. We hope this will enable the Auxiliary to be of service to the delegates that do not have caucus meetings prior to the session. There will be a charge of \$5.00 per person and reservations are required.

Serving as President of AKMA has been most rewarding in getting to know so many of our fine members around our beautiful state of Kentucky. Each member of the Auxiliary appreciates the cooperation and support that KMA and staff gives to us.

Mrs. R. Parnell Rollings, President

Recommendations, Reference Committee No. 1

Reference Committee No. 1 reviewed the Report of the President, Auxiliary to KMA and wishes to commend the Auxiliary for its continuing efforts on behalf of medicine in the State of Kentucky. We note with interest the changing of the Board meeting to Spring, with the second meeting in the Fall. The Committee recommends the acceptance of the Report of the President, Auxiliary to KMA.

Mr. Speaker, I move the adoption of this section of the report.

(The motion was seconded and carried.)

Report of the President-Elect

The role of the President-Elect is so designed to take an active part in the affairs of the Association during the year prior to assuming the Presidency which gives one an excellent insight into current problems, challenges, opportunities, and, hopefully, satisfactory solutions.

This past year, I have had the privilege of observing President Paul Parks and I can assure you of his dedication to the job and ability to accomplish those tasks that present themselves. He has given unselfishly of his time and talent and we all owe him our deepest gratitude.

Having previously served as a Trustee and as Chairman of the Board of Trustees, I have observed the mounting pressures upon us and witnessed KMA's growth in every area to equalize them. State and national legislation and liability insurance combine for serious challenges alone. Yet, we face many other problems that can be met with effective solutions only through a unified profession.

I look at the opportunity you have given me to serve

as your President with considerable pride. I also know that we must work closely together, help each other, and be ready to do our own individual part if we are to be successful. I accept this role knowing of your willingness. I intend to give as much time as possible to performing the duties expected of me and, again, urge the support and participation of every Kentucky physician to assure a successful year for all concerned. While we pause briefly at this meeting to reflect on some of our accomplishments, I hope we can also utilize this opportunity to rededicate ourselves for the future.

John P. Stewart, M.D., President-Elect

Recommendations, Reference Committee No. 1

The Committee next reviewed the Report of the President-Elect and offers Doctor Stewart the support of the organization in the difficult year to come. The committee recommends acceptance of the Report of the President-Elect.

Mr. Speaker, I move the adoption of this section of the report.

(The motion was seconded and carried.)

Report of the Speaker and Vice-Speaker of the House

Your Speaker and Vice Speaker would once again like to take this opportunity to thank you for your support and cooperation during this past year.

During the past two years, special-called meetings of the House have been held on two occasions to clarify previous action of the House. This was necessary so that the House of Delegates could have all the facts pertaining to the business discussed. We thank the House for its patience and cooperation.

Doctor Ben Crowder, our Parliamentarian, was appointed Vice-Speaker when Doctor McElwain moved out of state, and has continued to serve as Vice-Speaker and Parliamentarian.

The KMA Staff, as usual, has been outstanding in all of its efforts for the Speaker and Vice-Speaker and has made our duties much easier.

Once again we are having difficulty in appointment of Reference Committees due to the negligence of the county societies in submitting to the KMA office the names of Delegates and Alternates to the KMA. Please help us in any way that you can.

Thank you for the opportunity to serve.

Carl Cooper, Jr., M.D., Speaker
Bennett L. Crowder, II, M.D., Vice-Speaker

Recommendations, Reference Committee No. 1

The Reference Committee next considered Report No. 4, Report of the Speaker of the House. We noted the typographical error that Doctor McElwain moved from the state. It should have read that Doctor McElvein moved from the state.

The Committee wishes to emphasize the need for the component societies to provide a roster of Delegates and Alternates prior to mid-July in order that the Speaker of the House can appropriately make Reference Committee appointments.

The Committee wishes to express its appreciation for

the effort and expertise of the Speaker and Vice-Speaker as manifested by the smooth functioning of the House of Delegates.

The Committee recommends acceptance of the Report of the Speaker and Vice-Speaker of the House.

Mr. Speaker, I move the adoption of this section of the report.

(The motion was seconded and carried.)

Report of the Chairman, Board of Trustees

Introduction

As Chairman of the Board of Trustees concluding another Associational year, I am sure that my remarks should be directed toward exhortation of the House of Delegates to greater things, praise of the Board for its unrelenting work, relating the many hours we have spent solving our problems and being critical of the many forces arrayed against us, be they federal government, splinter groups of physicians, the legal profession, or general misunderstanding on the part of the public. However, one is very much aware you have all heard these stories before.

I rather feel that your Association finds itself in the position of the marathon runner with course half run or the channel swimmer when he is half way across. We have a long, dreary, boring, hard pull ahead. This requires steadfastness, courage, and unwillingness to give up—a realization that there must be no let up, that much pain and suffering are ahead for us. We have apathy on the part of a portion of our membership, a cynicism and faithlessness on the part of many interested people. This disillusionment with leadership on the part of the membership extends to all parts of our society—not only your KMA but to local and federal government, chambers of commerce, churches, unions, and any form of leadership.

I can tell you that your Board of Trustees has taken its job seriously and dealt with the problems in a circumspect and responsible way. I would tell you they can do much better if you will communicate with them, expressing your hopes, ideas, and frustrations.

The recurring malpractice problem is simply an example of how we sometimes take two steps forward and one step back. The public relations machine of our antagonists has the ear of the media, whereas organized medicine is quite naive about getting its message across. This stridency with which we exhort one another needs to undergo a transformation before being passed to the public.

Because of their importance and the fact that special meetings of the House of Delegates have been held during the last two years on Medicare and Liability Insurance, special reports on these subjects are included as Reports A and B. You will also find Special Report C on the subject of Continuing Medical Education.

There follows a "nuts and bolts" report of our meetings during the past year.

Summary of Board Meetings

First Meeting, September 30, 1976

Temporary Chairman, Secretary-Treasurer S. Randolph Scheen, M.D., introduced the new Board members

following which the Executive Committee was elected with James B. Holloway, Jr., M.D. chosen as Chairman of the Board, and Harold L. Bushey, M.D. as Vice Chairman. Cecil L. Grumbles, M.D. and Dwight L. Blackburn, M.D. were also named to serve with those who automatically are Executive Committee members; namely, the President, President-Elect, Vice-President, and Secretary-Treasurer.

Elected to serve on the Board of the Kentucky Foundation for Medical Care were James B. Holloway, Jr., M.D. and J. Wesley Johnson, M.D.

The Board appointed the KMA committees for the Associational year, voted to return to the Ramada Inn in Louisville for the 1977 Annual Meeting, and named Peter C. Campbell, Jr., M.D. and Mrs. Thomas E. Hall to the KEMPAC Board of Directors.

Following other reports and recommendations, the Board voted to conduct its next meeting on December 15, 1976.

Second Meeting, December 15-16, 1976

The KMA Board of Trustees held its second meeting of the Associational year on Wednesday, December 15, and Thursday, December 16.

President Paul J. Parks, M.D. presented a detailed report concerning his activities since assuming the Presidency of KMA, reporting on the unified membership referendum, noting that the members had voted not to have mandatory AMA membership. He also presented in full his activities relating to continuing medical education to include both his appearances before the State Board of Medical Licensure and his meeting with the KMA Continuing Medical Education Committee.

Secretary-Treasurer S. Randolph Scheen, M.D. reported on the membership and finances of the Association, and the Executive Vice President discussed current activities of KMA and staff involvement.

Doctor David Stevens discussed the actions of the AMA House of Delegates at the Clinical Convention in Philadelphia in December, and then made a presentation on behalf of the Board to the retiring Senior Delegate, Thomas Giannini, M.D., and Alternate Delegate, Charles G. Bryant, M.D., both from Louisville. Doctor Stevens further discussed preliminary plans for the re-election campaign of Hoyt D. Gardner, M.D. to the AMA Board of Trustees, noting that his term is up in June of 1977.

Other reports presented included a thorough presentation by Doctor Neville Caudill, President of the Kentucky Peer Review Organization, and Mr. Don Giffen, President of Blue Cross and Blue Shield, who discussed the merger of Blue Cross and Blue Shield, and responded to questions of the Board members.

Chairman James Holloway, M.D. presented items acted upon by the Executive Committee to include matters relating to KMA's Health Care Costs Council; a newly formed CT Scanner Committee; the implementation of House of Delegates' actions; a full report on Liability Insurance to include KMA testimony, progress in that test suit, and progress in the formation of a KMA Insurance Company. He further presented nominations to the Board for action regarding Governor appointments from KMA on the Advisory Council for

Medical Assistance and the Kentucky Drug Formulary Council.

A thorough discussion was held on a report compiled last year by the Maternal and Child Health Committee. Suggestions were presented to Doctor William Keller who serves on the committee as well as being a member of the KMA Board. The Board recommended additional committee activity and a further report at a later date.

Considerable time was spent discussing Medicare reimbursement and the new policy established by the House of Delegates in September, 1976. Officials of Metropolitan, Medicare's Part B Carrier in Kentucky, were in attendance for the purpose of making a presentation and responded to many questions presented by members of the Board. After hearing new and additional information that was made available to them in September, the Board felt it appropriate for the House of Delegates to have a special session for the purpose of reconsidering the policy concerning Medicare reimbursement on a statewide single classification basis. The Board noted that the delay in a final statement by KMA would in no way delay Medicare's implementation, and thus they felt it to be a more responsible action if the House had an opportunity to meet and confirm the action or change it as might be indicated prior to making this change in the reimbursement method. The Board then voted to ask the President to call such a meeting of the House of Delegates on February 10, 1977.

Other informational reports were presented concerning HSAs, the KMA Annual Meeting, *The Journal of KMA*, the Continuing Medical Education Conference of KMA, and the appointment policy of county health board members.

The Auxiliary President, Mrs. Parnell Rollings, appeared before the Board seeking approval for the Auxiliary to hold its Convention in the Spring, beginning in 1978, rather than at the same time as the KMA Annual Meeting. The Board approved such plans.

The next meeting of the Board was scheduled for February 10, 1977, preceding the special-called meeting of the House of Delegates.

Third Meeting, February 10, 1977

The third meeting of the Board of Trustees during the Associational year was held on February 10, 1977, at the Ramada Inn in Louisville prior to the special meeting of the KMA House of Delegates held on that same date.

President Parks reported on his activities since the last Board session and elaborated on his attendance at the AMA Leadership Conference and meetings with Metropolitan regarding the Medicare reimbursement mechanism in Kentucky. A report on AMA matters was then presented by AMA Trustee, Hoyt Gardner, M.D., of Louisville.

Chairman Holloway then presented a number of reports and recommendations from the Executive Committee to include a detailed membership and dues assessment report which resulted in a policy concerning members who had not paid their dues assessment of 1975. Further reports were presented concerning Liability Insurance and CME. The Board then authorized a group travel program through American Express for

KMA members attending the AMA Convention in San Francisco in June.

The Board named John S. Llewellyn, M.D., of Louisville, as Editor of *The KMA Journal* to fill the vacancy created by the death of *Journal* Editor, Henry B. Asman, M.D. A. Evan Overstreet, M.D. was named Associate Editor, and David L. Stewart, M.D. was named Assistant Editor.

In other actions, the Board approved funds for a special request requiring legal fees to defend an action taken by the KMA Judicial Council. Possible changes in the time for House of Delegates' meetings in the future were also considered, and nominations were made by the Board to the KEMPAC Board of Directors.

A full discussion was then held relating to the special session of the House of Delegates and all of the activities that had taken place involving Medicare reimbursement and KMA policy since the September regular meeting of the House of Delegates.

Prior to adjournment, the Chairman announced that the next meeting of the KMA Board would be held on April 6-7.

Fourth Meeting, April 6-7, 1977

The KMA Board of Trustees held its fourth meeting of the Associational year on April 6-7 at the Headquarters Office in Louisville. President Parks outlined activities in which he had been involved since the last Board session and a report was made on the implementation of the Medicare resolution passed by the House of Delegates on February 10. This implementation included the introduction of a resolution at the AMA Annual Convention in June and a meeting with Congressman Tim Lee Carter, M.D., in May on this subject along with representatives of HEW and SSA. Ongoing discussions are also being held with Metropolitan, Doctor Parks reported.

The Budget for fiscal year 1977-78 was approved by the Board and it was noted that the names of those members delinquent in paying the 1975 dues assessment in July would be published in *The Journal*.

Nominations were made by the Board to forward to the Governor for physicians to serve on the Board of Medical Licensure and the Health Facilities and Health Services Certificate of Need and Licensure Board.

The Board was brought up to date on the activities of the Physicians' Assistant Program at the University of Kentucky by its newly appointed Director, Hal Wilson, M.D.

The Board of Medical Licensure report called attention to the statewide hearings on CME and revealed plans to poll physicians on their feelings on this subject.

Chairman Holloway then presented a number of reports and recommendations from the Executive Committee to include the endorsement of an AMA Program on "Diagnosing and Reporting Driver Impairment—A Medical-Legal Problem" to be held September 30, following the KMA Annual Meeting. A new member recruitment and retention program was outlined for the Board and approval of the 1977 KMA Leadership Conference program to be held July 14 in Lexington was given.

The Board named William W. Hall, M.D., Owensboro; Thomas L. Heavern, M.D., Highland Heights; and Allen E. Grimes, Jr., M.D., Lexington, to serve as

Regional Editors of *The Journal*. Stephen Z. Smith, M.D., Louisville, was named as Assistant Scientific Editor.

In other action, President Parks presented the duties of the newly formed Health Care Costs Council which are to: a) identify and examine the causes of increased health expenditures; and b) review optional courses for public and KMA policy to cope with these rising costs.

Checks totalling over \$17,000 were presented by Mrs. Parnell Rollings, President of the Auxiliary to KMA, to the Deans of the two medical schools in Kentucky from the AMA-ERF Fund. The funds were made available through the efforts of the Auxiliary members across the state.

Fifth Meeting, July 13, 1977

The Board conducted its fifth meeting of the Associational year on July 13 at the Hyatt Regency Hotel in Lexington just preceding the KMA Leadership Conference. President Parks presented a detailed report on his numerous activities since the last Board session, highlighting the time spent on Medicare and Liability Insurance matters.

A report was heard on the March KMA-KNA Joint Practice Seminar and recommendations from the Committee on Community and Rural Health to county boards of health and the distribution of information on tuberculosis were approved. Legislative activity in the Interim Committee system was discussed, noting much KMA involvement and testimony was being required. KMA Senior Delegate to the AMA, David Stevens, M.D., presented a full report on the AMA Convention and especially noted that Kentucky's Hoyt Gardner, M.D. was re-elected to a three-year term on the AMA Board of Trustees.

A Seminar on Negotiations was authorized for Spring of 1978 and a full and lengthy report was made on Liability Insurance, the ruling of the Supreme Court, and KMA's daily activities since that time to include involvement in the petition of the Supreme Court for a re-hearing on specific aspects of its decision. It was announced that the Board would next meet on August 10 and 11.

Sixth Meeting, August 10-11, 1977

A major purpose of the August Board meeting is to review the committee reports prior to their being submitted to the House of Delegates, and record the actions of the Board on each report for consideration by members of the House. Committee Chairmen and Trustees discussed the reports in detail. Additional reports were heard by the Board from the President, the Senior Delegate to the AMA, the Board of Medical Licensure, and KPRO.

A major and lengthy matter considered by the Board was the consideration of KMA forming a Liability Insurance company. A representative of Marsh & McLennan in Chicago was in attendance and made a detailed presentation on the pros and cons of the formation of such a company, and proposed a feasibility study that would provide KMA with the necessary details to make a sound decision.

A number of legislative matters was considered to include support of the AMA Comprehensive Health Care Insurance Act; matters relating to the Department

for Human Resources to include Laboratory Regulations; and approval was given to the Auxiliary for a special day in Frankfort during the 1978 Kentucky General Assembly.

Special recommendations of KMA committees were presented, and approval was given to conduct a Residents' Workshop next April, and for an in-hospital appeals mechanism which has received much work by the Hospital Committee. A nominee for the KMA Judicial Council was approved for presentation to the House of Delegates, and Editor and Assistant Editors were finalized for *The KMA Journal*, with A. Evan Overstreet, M.D. named as Editor.

In other action, nominations were sent to the Governor for appointment to the Comprehensive Health Planning Council and the General Radiation Advisory Committee.

A number of items were then considered relating to plans for the 1977 KMA Annual Meeting, and consideration was given to future meeting sites, but no final action was taken.

In the area of presentations, Past President Hull was presented with bound volumes of *The Journal* during his tenure as KMA President, and Kenneth P. Crawford, M.D. received a plaque from Blue Cross and Blue Shield for his many years as Chairman of the KMA Advisory Committee to Blue Cross and Blue Shield.

The seventh session planned for the Board of Trustees for this Associational year will be held on Sunday, September 25, with the eighth and final session planned for Wednesday, September 28.

Executive Committee

The Executive Committee conducts much of the day-to-day activity of your Association, and in addition to the Board meetings, it met on eight other occasions: October 27-28, 1976; December 15, 1976; and during 1977 on February 9, March 31, July 14, August 10, September 1, and September 27. I will not try to summarize their many actions, but only tell you their workload is great and their efforts unsurpassed.

The complete Executive Committee and Board of Trustee Minutes for the Associational year are being provided to the members of Reference Committee No. 1 and are available to you.

Ad Hoc Committees

It is again with gratitude that I thank the members of the Ad Hoc Committees of the Board; namely, 1) The Ad Hoc Committee on Professional Liability Insurance; 2) The Ad Hoc Committee on Podiatry; 3) The Ad Hoc Committee on Overview of KMA Peer Review Activities; 4) The Ad Hoc Committee to Study the Report of the Council on Public Higher Education; 5) The Ad Hoc Committee on Primary Care; and 6) The Ad Hoc Committee on CT Scanners.

The Primary Care Committee is charged with developing guidelines for KMA policy on physician extenders but details are not yet finalized. The CT Scanner Committee was formed to develop guidelines for the use of CT Scanners and it is anticipated that these will be finalized by Annual Meeting time. Full reports of the committees will be provided to the Reference Committee members and extra copies will be available for those members desiring them.

Thank you for the privilege of serving as your Board Chairman this year.

James B. Holloway, Jr., M.D.
Chairman, Board of Trustees

Recommendations, Reference Committee No. 1

The Committee next reviewed the Report of the Chairman, Board of Trustees, except Special Reports A, B, and C. The Committee recognizes that their meetings are becoming more numerous and more time-consuming and wishes to thank them for the sacrifice this represents. The Reference Committee recommends the acceptance of the portions of the Report which were referred to our Committee.

Mr. Speaker, I move the adoption of this section of the report.

(The motion was seconded and carried.)

Report of the Secretary-Treasurer

I am pleased to report to the House of Delegates in my second year as Secretary-Treasurer. As you know, these two offices were combined, and I feel that this action has been beneficial to the operations of KMA. In this combined role, many related duties can be carried out by one person, and many previously time-consuming, but necessary, functions can be handled in a more expeditious manner.

As the Secretary-Treasurer, my duties include routine review and monitoring of formal internal affairs of the Association; reviewing financial transactions and operating finances; acting as the Corporate Secretary and legal agent for service of process; serving on the Executive Committee, Board of Trustees, and Judicial Council; and representing the Association as spokesman on organizational matters. These duties sometimes require quite a bit of time, but are always interesting, and I find it a pleasure to discharge them.

With regard to the Headquarters Office, I think that all members will be gratified, not only with the courtesy, efficiency and dedication of the staff, but also with the sophisticated business operation they conduct. Our building and grounds are located on 3532 Ephraim McDowell Drive, and are attractive and well maintained. I would urge every member to pay a visit to the building at some time to tour it and to observe the activities that take place.

Each year, for the past several years, I have reported on the number of committee meetings, physician hours spent and physician miles traveled in conducting Association business. I won't reiterate a long list of redundant statistics, but would quickly point out that the documented physician time spent at KMA has appreciably increased over previous years. All this points to the fact that KMA is becoming more deeply involved in ongoing issues, in addition to confronting new challenges to the profession through the Committee system.

The Board of Trustees has met eight times since September, including a special meeting in Lexington prior to the Leadership Conference, and the Executive Committee will have met eight times before the Associational year is finished. The countless issues, threats, decisions and situations that must be dealt with by the Board sometimes seem overwhelming. I think it is sufficient to

say that the gentlemen who comprise the Board, and particularly the Executive Committee, which meets at least as often as the Board, are due a great debt of appreciation and support for the many long hours and even days spent in properly dealing with Association affairs.

It is a pleasure to be able to report that the Association's finances are being judiciously used and secured. For more information I would direct the attention of the membership to the annual audit statement contained in material sent to the House of Delegates. The House is to be commended for its wisdom in establishing a reserve fund, and I believe the benefit of the five-year dues plan is self-explanatory, as indicated in the financial statement.

Although amazing may seem like an anachronistic term to apply to the increased external activity that KMA is involved in, it is apt. It would be difficult to present an accurate picture of the amount of time and energy spent in meeting and working with or against numerous outside organizations and forces that relate to our Association and our profession. Whereas KMA may be involved in as many as six meetings on any one day, no more than two may be in the Headquarters Building. It is not uncommon to find our leaders and staff participating in discussions or negotiations at any one time in such disparate places as Chicago, St. Louis, Frankfort, and Owensboro. By necessity, our outlook and influence has been broadened far beyond representational or even strictly medical matters. It has become apparent that KMA must assume an aggressive, and sometimes even militant, stance if we are to maintain the integrity and proper status of the profession.

As the only elected businessman/officer member of the Association, I am privileged to see things from a unique perspective. From the business standpoint, I am very much aware of the enormous financial, personnel and material costs KMA has to bear to accomplish its objectives. As a physician, I am equally aware that KMA's force may often appear to be diminished in its efforts to represent physicians. But by combining the two outlooks, I am sincerely convinced that our efforts are well spent, and am proud to be a part of our mutual endeavor.

I thank you for allowing me the privilege to be of service.

S. Randolph Scheen, M.D., Secretary-Treasurer

Recommendations, Reference Committee No. 1

The Reference Committee reviewed the Report of the Secretary-Treasurer and wishes to commend him for his continuing good work. The Committee recommends that this Report be accepted.

Mr. Speaker, I move the adoption of this section of the report.

(The motion was seconded and carried.)

Report of the Editor

The 75th Anniversary year of *The Journal* has been an eventful one in terms of change. The first issue of the year, which underwent a face-lift in cover and internal makeup, marked a beginning for several new features. These changes were wrought by the efforts and

dedication of Doctor Henry Asman, who before his untimely death in December served a few short months as *Journal* Editor. His revitalization plan for *The Journal* was an attempt to strengthen the communications among the membership of KMA. Trustee reports, summaries of Board and other committee meetings, Headquarters activity reports, and recognition of members were a few of the additions brought about in Volume 75, Number 1.

Since my appointment as Editor in February, 1977, at which time I agreed to serve until a permanent Editor could be named in September, added emphasis has been placed on making *The Journal* a reflection of the practice of medicine in the Commonwealth of Kentucky.

A broadened editorial base has been established through the appointment of regional editors who will be called upon to review scientific and special articles, as well as generate contributions from members throughout the state. The addition of an Assistant Scientific Editor to aid in reviewing and editing articles submitted for publication emphasizes the importance of *The Journal* as a scientific forum for Kentucky physicians.

By disseminating knowledge through original case reports, Grand Rounds contributed by the medical centers, and "version papers" highlighting recent medical symposia, *The Journal* can provide an important and vital service to the practicing physician in the state. This "cultivation and advancement of science and literature" reflects the high priority given to continuing education by the Officers and Board of Trustees of the Association.

The fiscal picture of *The Journal* continues to concern us due to rising printing costs and increasing problems with regard to advertising priorities on a national level. However, we are able to continue on our present course and are appreciative of the recent increase in local advertising which helps to sustain us.

A *Journal* survey conducted in May of 500 physicians randomly selected revealed a readership of over 95%. The survey, which enjoyed a 54% return, revealed that 73% of those responding felt *The Journal* was worthwhile and should be continued. Many insights into possible avenues of communications were gained through the numerous comments of the respondents. The feeling of the editors that *The Journal* should serve an educational purpose through more and better scientific and clinical articles was reaffirmed by this survey.

I would like to thank the members of the Editorial Board, which meets on a monthly basis, for the time and effort they have expended on matters of *The Journal*. Doctor Paul Grider and the Board of Consultants are also to be commended for their fine work throughout the year in evaluating scientific papers submitted.

As always, the Editorial Board continues strong in the feeling that *The Journal* has a unique and valuable place in the affairs of physicians in Kentucky.

John S. Llewellyn, M.D., Editor

Recommendations, Reference Committee No. 1

The Reference Committee reviewed the Report of the Editor and wishes to thank Doctor John S. Llewellyn

for accepting this position as an interim appointment following the untimely death of Doctor Henry Asman. Reference Committee No. 1 recommends that this Report be accepted.

Mr. Speaker, I move the adoption of this section of the report.

(The motion was seconded and carried.)

Report of the Delegates to AMA

The House of Delegates of the American Medical Association held two meetings during the year reported (July 1, 1976 through June 30, 1977). First was the 30th Clinical Convention held in Philadelphia, Pennsylvania, December 4-8, 1976, and the second was the Annual Convention in San Francisco, California, June 19-23, 1977. Attending the Philadelphia Convention were Delegates Thomas Giannini, M.D., Louisville; Fred C. Rainey, M.D., Elizabethtown; and David B. Stevens, M.D., Lexington. Alternate Delegates were Charles G. Bryant, M.D., Louisville; Wally O. Montgomery, M.D., Paducah; and Lee C. Hess, M.D., Florence. In addition, President Parks attended.

Representing Kentucky at the second meeting were Delegates Harold D. Haller, M.D., Louisville; Fred C. Rainey, M.D., Elizabethtown; and David B. Stevens, M.D., Lexington. Doctor Kenneth Crawford replaced Doctor Charles Bryant as Alternate Delegate, with Doctors Hess and Montgomery continuing their service. The San Francisco Convention was also attended by James B. Holloway, M.D., Chairman of the Board of Trustees; John P. Stewart, M.D., President-Elect; John M. Baird, M.D., Danville, Vice President; Carl Cooper, Jr., M.D., Speaker of the House; and Robert G. Cox, William T. Applegate, and Robert E. Klinglesmith of the KMA staff.

The highlight of the year was the re-election of Hoyt D. Gardner, M.D. of Louisville as Trustee to the American Medical Association. Hoyt was campaigning for a second three-year term as an AMA Trustee. His re-election was achieved on the first ballot. Because of conflicts in scheduling, Doctor D. Kay Clawson, Dean of the University of Kentucky College of Medicine, withdrew his nomination for the AMA Council on Medical Education. Doctor Clawson was subsequently appointed to the Residency Review Committee for Orthopaedic Surgery.

In other elections, Thomas Nesbitt, M.D. of Nashville, Tennessee, was elected President-Elect. In addition, William Rial, M.D. was elected as Speaker and Harrison Rogers of Georgia was elected as Vice-Speaker. During the Convention, John Budd, M.D. of Ohio was installed as the current President, and following the Convention, Robert Hunter, M.D. was selected as Chairman of the Board of Trustees.

The business of the House of Delegates usually consists of about 100 items for consideration. These are reports from various standing and ad hoc committees and resolutions which are brought for consideration from the various state delegations and the section councils. For purposes of discussion, the problems will be discussed as external and internal problems. In both sessions of the House of Delegates, the primary external problem was the relationship of the medical profession

to the federal government. This revolved around legislative proposals of which the AMA's plan to seek sponsorship of a bill based on the insurance mechanism subsidized by taxes was reaffirmed. This policy was challenged by an articulate and vocal minority who questioned the wisdom of the AMA in sponsoring any type of national health program. In the Annual Meeting, the title of the proposal was changed to comprehensive health insurance.

Various regulatory problems relating to the HEW, the HSA, and the Federal Trade Commission's recent attacks on the code of ethics, advertising, and relative value scales were discussed. The Board of Trustees, the staff of the AMA, and the House of Delegates remain cognizant of the threat to the free practice of medicine, and various strategies were adopted to preserve those elements of the medical practice now thought desirable for patient confidentiality, patient selection of doctor, freedom of doctor for patient consideration, and the preservation of the individual freedoms for the physician.

Internal affairs have included generally matters related to medical education for both the undergraduate and graduate, the formalized graduate programs of interns and residents, and now continuing medical education. The House of Delegates continues to develop policy regarding the formation of the Coordinating Council on Medical Education and its various liaison committees. The AMA House of Delegates has regretfully surrendered part of its initiative and authority to other groups. This authority has been surrendered only with knowledge and with some regret though the actions were taken with benefit to the public as the uppermost consideration.

Also, internal affairs have included dues and the AMA budget. Dues have been maintained at \$250 per year with an adequate reserve fund being accumulated with a sound fiscal strength at the present time. The membership continues to be a problem with the AMA attracting less than its fair share of newly eligible physician membership. Great strides have been made in attracting medical students and house staff members, and hopefully this trend will carry over into full dues-paying members in the future. Membership has exceeded projections following the recent dues raise.

A Resolution was introduced by the Kentucky Medical Association to correct the inequities of Medicare reimbursement based on geographical profiles. This Resolution was not adopted but referred to the Board for its consideration and implementation.

On behalf of the current Delegates and Alternates, it is my privilege to extend our gratitude to the members of the Kentucky Medical Association who have selected us as their representatives and so generously have supported our efforts at the AMA level. This has provided us with an opportunity to return a Kentucky physician to the AMA Board of Trustees through the concerted action of Kentucky physicians and their wives.

In addition, the Clinical Convention in Philadelphia marked the retirement of Delegate Tom Giannini and Alternate Delegate Charles Bryant. These men had served the KMA for six terms. They were well respected by Delegates from other areas and from those of us who know them well, a fond thanks for services well done. The Kentucky Medical Association and the AMA

House of Delegates are better organizations because of the services they have offered.

The Delegation also wants to thank the KMA staff for its excellent work which appears better than any other state.

David B. Stevens, M.D., Senior Delegate

Recommendations, Reference Committee No. 1

Reference Committee No. 1 next reviewed the Report of the Delegates to the AMA. The Committee notes the retirement of Delegates Giannini and Bryant and wishes to thank them for their many years of service on behalf of KMA. The Committee recommends acceptance of this Report.

Mr. Speaker, I move the adoption of this section of the report.

(The motion was seconded and carried.)

Report of the Executive Vice President

In making this tenth Annual Report as your Executive Vice President, I am fully aware that each year organized medicine is confronted by new problems that seem to grow proportionately with public awareness and political attention directed to physicians and medical care. Each of these problems must be met and dealt with aggressively in addition to maintaining a positive and progressive stance with regard to ongoing issues. It is gratifying to know your state medical association stands in the forefront in trying to come to grips with these many circumstances. The effectiveness of KMA in achieving positive solutions is certainly not complete, but the organization provides one of the most affirmative mechanisms for dealing with those pressures and attitudes that would control the individuals who have made medical care in America the best in the world.

To be involved with the Association in its efforts to preserve the free practice of medicine and maintain the high quality standards that are demanded is exciting and challenging, and at times, frustrating. In spite of all of the sincere efforts of the Board of Trustees and officers working in concert on various problems, it may sometimes seem that few positive accomplishments result. But when the leadership of the Association faces a specific problem, listens to all views on it and arrives at a consensus, the policy-making process is strengthened and with it, the Association. I think it is safe to say that through this process, KMA has developed into a powerful segment of organized medicine.

To meet these challenges, the volume of work that must be handled by officers and staff has increased enormously in spite of the fact that this is an "off" state legislative year. As one example, the Interim Legislative Committee System has necessitated very close monitoring on almost a daily basis so that KMA's positions can be represented and to keep aware of legislative issues that may be prefiled for the next regular session of the Legislature.

In past months, officers and staff have averaged three days per week appearing in Frankfort before a legislative committee or administrative agency, and every effort is made to keep individual legislators fully advised of medicine's views.

On related fronts, countless hours have been devoted to keeping up with the activities of Health Systems Agencies and the changes and regulations to the Health Planning Law, PL 93-641, the National Health Service Corps, Primary Care Centers and physician extender proposals, PSRO, Medicaid/Medicare and seemingly countless other subjects. All of these issues are directly related to government actions, and we are finding that our dealings with the different branches of government on all levels, whether voluntarily or involuntarily, are becoming a routine demand.

The Association is also involved with government in a more direct way. Because of its non-profit status, KMA has always operated under nearly as many strictures of federal regulations as private physicians' offices face. But this year saw intensified requirements and reporting demands from the Federal Trade Commission, the Federal Election Commission, and an audit by the Internal Revenue Service.

The Liability Insurance issue has developed into a daily concern of many physicians, and it has had an equal effect on the volume of work at KMA. The current prospects for resolving this problem may seem to be discouraging, but our work in this area has doubled, if that's possible, in seeking solutions.

No clearcut answers have become apparent from our constant contacts with the major liability insurance carriers, the Office of the Commissioner of Insurance and other related parties to the liability legislation. The one thing that has become apparent is that there probably are no simple answers, but all possible alternatives are being investigated, evaluated and analyzed.

It may be out of place in this report to acknowledge the leadership of the Association, but I think it is important to at least point out the constant support and direction given to staff. Our jobs are made easier because of the dedication, interest and energy of the Association's leadership. It wouldn't be appropriate to identify individuals here, but the wisdom of the House of Delegates in choosing these physicians has been paid back many times by their ongoing diligence. Many of them are required to spend many days out of the office in meetings and representing the Association, at home and out of state, on nights and weekends, and with no compensation except for the infrequent "thank you."

It is appropriate, too, to report on the other staff members who without exception can always be expected to give a full 100 percent, and I feel fortunate in having the privilege of working with them. This year we welcomed Don Chasteen to the executive staff and he quickly became involved in legislative activities. He has already spent quite a bit of time working with the Interim Legislative Committee System and meeting our state's legislative representatives. He will be our main staff representative in Frankfort in January, and has already proven to be an asset to staff efforts. We were also happy to welcome Shirley Roessler to the executive staff. For many years, Mrs. Roessler worked with the Rural Kentucky Medical Scholarship Fund and the KMA Placement Service. In addition to her previous duties, she now provides staff service to the Judicial Council and on other administrative matters related to the office of the Executive Vice President.

Financially, the Association has a sound posture.

Thanks to the foresight of the Budget Committee and House of Delegates, our reserves have more than doubled in the past two years. We have completed five years' payments on the KMA Building Mortgage Schedule leaving ten years to complete payment of the building addition. Growth in membership continues to be beyond our anticipation, and with a new program to communicate with medical students, interns and residents directly from the Headquarters Office, we feel confident this growth will continue. We will be entering the third year of the five-year dues plan and our cost containment program has kept our expenditures below our budget each year in spite of rising maintenance and supply costs, increased utilities, new programs and other inflationary factors. We constantly look for ways to save money, reduce expenses, and economize but these measures would have only limited success without the planning safeguards built into the budget and the security established by the reserve fund.

Committee activity this year has maintained at least an active pace as in the past, and a word of commendation is in order for the chairmen and members of over 40 councils and committees that meet and carry the ongoing functions of the Association. Their work consists of far more than merely sitting down together for a few hours every few months. An example is the Judicial Council which has been required to meet almost monthly with as many as 30 continuing agenda items to resolve. Considering that each meeting of each committee may require as much as eight hours of preparation and virtually endless follow-up time, it sometimes seems the end product is never in sight. Yet the final reports of the committees attest to their progress and accomplishments.

One of the more important functions of the Association is the Annual Meeting and the Scientific Program Committee has done its usual outstanding job this year. Association members who are directly involved in the planning stages of the meeting can appreciate the fact that organizing and implementing the September session is literally a year-long job. From initial discussions on the theme of the meeting in October, to arranging for the last speaker to catch his plane home the following September, the annual session requires some work every day. KMA can be proud that our meeting boasts one of the best attended in the country and one of the best supported by our exhibitors.

I will not try to summarize the day-to-day activities in the Headquarters Office. Statistics relating to mail, meetings, telephone calls, visitors, publications, programs, allied group representation, legislation, personnel retention, building and grounds maintenance, etc., would be long and probably boring reading. However, I would emphasize that much goes on every day, all designed to make things better for the physician, the profession, and the public. Meetings in which staff are involved are reported on throughout the year to the Board of Trustees and a listing of these meetings has been placed in the hands of the Reference Committee members. They do pinpoint one area of staff involvement on an annual basis.

I was privileged to complete 15 years with KMA this year. During the past decade and a half, I have seen the profession and the Association grow and

change, not only to meet new threats, but more importantly, to face new challenges. The term "organized medicine" has many connotations, but to me it has come to mean dedication, concern, and the best aspects of voluntary free enterprise service. I thank you for giving me the privilege of being a part of it.

Robert G. Cox, Executive Vice President

Recommendations, Reference Committee No. 1

The Reference Committee No. 1 reviewed the Report of the Executive Vice President and wishes to commend him and the KMA staff for a job well done. A review of the activities of the KMA staff for the past Associational year reflects a surprising quantity and spectrum of functions on our behalf. Without the behind-the-scenes efforts of these dedicated people, the House of Delegates would be severely hampered in its function. The Committee recommends the acceptance of the Report of the Executive Vice President.

Mr. Speackr, I move the adoption of this section of the report.

(The motion was seconded and carried.)

Report of the Advisory Committee to the KMA Auxiliary

The dedication of the Auxiliary to the Association is exemplified by the numerous activities it has undertaken on behalf of medicine. Its accomplishments are impressive and give an excellent picture of the Auxiliary's many areas of concern and interest.

Of particular interest is the Auxiliary's continual support of the University of Louisville and University of Kentucky schools of medicine through the AMA-Education and Research Foundation. This year the Auxiliary has again exceeded its goals while obtaining a new record amount obtained from its collections.

The officers and the Auxiliary as a whole are to be congratulated for their efforts, achievements and support. We would like to thank them for these activities they have taken on our behalf.

The Auxiliary is a vital segment of organized medicine and we urge all physicians' spouses to join and become active in the Auxiliary.

Hoyt D. Gardner, M.D., Chairman

Recommendations, Reference Committee No. 1

The Report of the Advisory Committee to the KMA Auxiliary was reviewed and the Committee recommends acceptance of this Report.

Mr. Speaker, I move the adoption of this section of the report.

(The motion was seconded and carried.)

Mr. Speaker, I move the adoption of the Report of Reference Committee No. 1 as a whole.

(The motion was seconded and carried.)

Mr. Speaker, as Chairman of Reference Committee No. 1, I would like to express my thanks to each of the Committee members, Doctor Walter R. Brewer, Doctor Peter C. Campbell, Doctor Elmer H. Jackson, and Doctor W. N. Richardson for their help in preparing this report and to Mrs. Jean Wayne for her outstanding patience and understanding.

REFERENCE COMMITTEE NO. 1

Robert E. Smith, M.D., Covington, Chairman
Walter R. Brewer, M.D., Lexington
Peter C. Campbell, M.D., Louisville
Elmer H. Jackson, M.D., Danville
W. N. Richardson, M.D., Cadiz

REFERENCE COMMITTEE NO. 2

*Peter P. Bosomworth, M.D., Lexington
Chairman*

Reference Committee No. 2 considered the following reports and resolutions:

13. Report of the Scientific Program Committee
 14. Report of the Scientific Exhibits Committee
 15. Report of the Continuing Medical Education Committee
 16. Report of the Cancer Committee
 19. Report of the Hospital Committee
 33. Report of the Emergency Medical Care Committee
 35. Report of the Interspecialty Council
 1. Report of the President, the entire section numbered Topic II—Continuing Medical Education, beginning on Page 1.3 and ending on Page 1.4, *only*
 5. Report of the Chairman, Board of Trustees, Special Report C—Continuing Medical Education, *only*
- Resolution P—The Publication Entitled, "Hospital Regulation: A Report of the Special Committee on the Regulatory Process," published by the American Hospital Association, 1977 (Pennyryle Medical Society)
- Resolution R—Institutional Control of University Hospitals (KMA Board of Trustees)

Report of the Scientific Program Committee

As in the past, the KMA Scientific Program Committee met this year in November to plan the Scientific Program for the KMA Annual Meeting. This amount of time is necessary to coordinate the 23 or 24 out-of-state speakers and the 19 specialty society meetings.

In December your Chairman met with the Presidents of those specialty groups to discuss their participation in planning the Scientific Session. The Scientific programs of the specialty groups held in conjunction with our General Session have proven over the years to be valuable, and we feel provide an excellent contribution to the continuing education to our members. I am extremely grateful for the excellent cooperation in planning the overall meeting that we always receive from the specialty groups.

1977 will mark the fifth year that the meeting will be held at the Ramada Inn-Bluegrass Convention Center. The Committee feels that the Ramada Inn offers excellent meeting facilities as well as very pleasant surroundings and this combination is a most attractive incentive for attending the Annual Meeting. The Scientific Program Committee's objective is to present an appealing and educational program that will provide maximum benefit to the members of KMA.

The themes for this year's meeting include "Cardio-vascular Problems," "Cancer," and "Alcoholism." The selection of themes for portions of the Scientific Program have been beneficial in past years and are designed to maintain continuity of the program and afford an opportunity for indepth coverage of the subject.

This year's program will be comprised of individual presentations and a panel discussion. The committee members and specialty groups have gone to great lengths to bring in some of the country's outstanding speakers. We are proud of the fact that KMA's Annual Meeting Scientific Program continues to be one of the most outstanding state meetings in the country and is accredited for continuing education by the American Medical Association and the Kentucky Academy of Family Physicians.

Again this year, the South Central Bell Telephone Company is sponsoring the message center in the Technical Exhibit Hall. This continues to be a valuable service to our Association membership and we are extremely grateful for it.

As Chairman of the Scientific Program Committee, I am very appreciative of the efforts of those who assisted in the formation of this program and would like to give special note of appreciation to the Committee members, Specialty Group Presidents, and Specialty Program Chairmen. Any suggestions the membership might have for future programs will certainly be very welcome.

Richard F. Hench, M.D., Chairman

Recommendations, Reference Committee No. 2

The Reference Committee reviewed the Report of the Scientific Program Committee and commends the Committee for the outstanding program this year. The Committee wishes to express its thanks to the South Central Bell Telephone Company for sponsoring the Message Center again this year.

Reference Committee No. 2 recommends the acceptance of the Report of the Scientific Program Committee.

Mr. Speaker, I move the adoption of this section of the report.

(The motion was seconded and carried.)

Report of the Scientific Exhibits Committee

The Committee on Scientific Exhibits meets late in the Associational year in order to review the applications for scientific exhibit space at the Annual Meeting. As a result, it has been customary for the Committee to submit a final report prior to the meeting to make sure that it will be included with all committee reports presented to the House of Delegates.

There are expected to be 18 exhibits this year, which will be located along the entrance to the General Assembly Hall in the Bluegrass Convention Center. This year the exhibit area will be set up with curtain walls due to the increasing expense of erecting hardback walls and lack of use by the exhibitors. The scientific exhibitors will be available at the intermissions to discuss their exhibits and can be easily identified by their special name badge and ribbon.

Last year the Committee again presented its special Achievement Award for those exhibitors who had made extra efforts to ensure their exhibit would achieve the highest teaching value. Also, each exhibitor will receive a certificate for participating in this phase of continuing medical education.

Our Committee feels that the scientific exhibits are a valuable contribution to postgraduate physician education and strongly encourages everyone attending the Annual Meeting to visit these exhibits.

Richard A. Kielar, M.D., Chairman

Recommendations, Reference Committee No. 2

The Reference Committee reviewed the report of the Scientific Exhibits Committee and expresses thanks for the high quality of scientific exhibits. We wish to encourage more scientific exhibit participation. The Committee feels that the scientific exhibits are a great asset to postgraduate physician education.

The Reference Committee recommends that the Report of the Scientific Exhibits Committee be accepted.

Mr. Speaker, I move the adoption of this section of the report.

(The motion was seconded and carried.)

Report of the Continuing Medical Education Committee

Continuing medical education continues as a major concern of the Association. Based on hearings held around the state, the Board of Medical Licensure determined that it would not pursue mandatory continuing education further at the present time, and, of course, the House of Delegates ruled in September to support voluntary CME.

In this regard, KMA has established a records keeping program of voluntary CME activities, and all members have been contacted.

A major component of involvement in CME by KMA is the accreditation process, and this year seemed to bring a great many questions concerning the way that process works. Nationally, the AMA joined together with a number of other national level groups, which include the American Association of Medical Colleges, the American Hospital Association, the American Board of Medical Specialties and others, to form the Coordinating Council on Medical Education. Subsidiary to this group is the Liaison Committee on Continuing Medical Education. The goal for the LCCME, set by the founding groups, is for it to assume authority for accreditation of all continuing medical education activities, including residency programs of medical schools and the accrediting programs of state medical associations.

The Committee was concerned that the traditional authority of AMA in the CME area would be transferred to this group, whose representatives were not all physicians, and that physicians might not have control of their own "CME destinies." A further concern was that all of the effects of our Committee to this point might have to be modified to fit new procedures that might possibly be developed by the LCCME.

These concerns were transmitted to the Board of

Trustees, which made further inquiries to AMA and, apparently, the Committee's concerns are not justified in a practical sense because none of the routine processes will be changed. The reason for formation of the LCCME was to keep CME accreditation authority in the hands of the private sector rather than having that authority be assumed by the federal government. This effort has apparently been effective because the LCCME has been given accreditation authority by the U.S. Office of Education for the next two years.

These concerns obviously had a restrictive effect on the Committee's accreditation work. The Committee worked to insure that local groups interested in the accreditation process would not have to become involved in the confusion recognized by the Committee; and so, accreditation applications and requests were delayed for the major part of the year.

Two institutions were granted accreditation, however, this year, although their applications were in process prior to the time that these questions came about. They were the Good Samaritan Hospital in Lexington, and the Lexington Clinic.

The Committee is aware of a parallel concern of the need for locally available and accredited CME, while it is charged at the same time with insuring that such programs conform to fairly strict guidelines, that will maintain the quality of educational offerings. Admittedly, the accreditation process is time consuming and may be somewhat difficult, but the Committee is eager to work with any institution that is committed to the concept and seeks the accreditation process.

Faculty Scientific Achievement Award recipients from both medical schools were selected. These recipients are chosen from nominations submitted by the deans. The award serves to recognize outstanding clinical faculty members.

The Continuing Medical Education Conference was conducted in Elizabethtown in February. There were a number of items of agreement, but they, and all of the subjects of discussion, are too numerous to mention here. Some of the major points can be addressed, however.

With regard to medical school and residency training, it was obvious that a number one priority should be to have the same number of residency spots as graduate students. These should be competitive positions, however, and there should be good educational activities in peripheral hospitals to allow for an interchange with the medical schools. As training relates to practice location, it was agreed that sites for establishing physicians in a central area of need should be encouraged, rather than looking at the number of physicians county by county.

Factors that affect a new physician's location, which should be considered in trying to correct the distribution problem, are the quality of life in the area, individual personality characteristics, the medical critical mass (the number of peers and availability and extent of facilities), and habits formed in early experience. Along with the realization that a realistic approach in the future would be the establishment of clinics in "centralized" areas rather than individual counties, it was noted that although a greater interest has been indicated among the students in primary care, experience has shown that they don't necessarily practice in critical areas.

On the subject of continuing medical education, all agreed with the concept, but recognized some of the shortcomings in making CME mandatory. A major difficulty is to determine at what level of practice a physician stands before he enrolls in a CME program, if any resulting benefits of it are to be shown. With regard to rural physicians, it was agreed that providing CME to them is a joint responsibility of medical schools, medical societies and the Legislature, but the primary responsibility rests with the physician himself.

The difficulty was mentioned of providing ongoing general CME subject matter to all physicians, because there is only so much general medicine applicable to the individual practitioners. As individual needs are ascertained, probably the best sources of CME are specialty societies.

In general, it was agreed that CME should not be tied to any one particular method, that all physicians should be looked upon as teachers as well as students, and that KMA and the two universities should work together to mount an effective CME program.

Ideally, the Conference is attended by faculties from the two medical schools and the leadership and appropriate Committee members from KMA. It was first started to serve as a forum for the academic and practicing factions of the profession to discuss areas of mutual concern and interest. While the Conference has served a useful purpose in the past, and in February did address some substantive issues, based on attendance, the Committee would recommend that the Conference not be continued in the future unless specific need is indicated at the time, to be determined by the Board of Trustees.

A special word of thanks is due to the members of the Accreditation Subcommittee for the extra efforts they have put forth in working with applicant groups and conducting site surveys. They are D. Vertrees Hollingsworth, M.D., Georgetown; Stuart Graves, M.D., Louisville; Frank R. Lemon, M.D., Lexington; William J. Temple, M.D., Covington; and Sam H. Traughber, M.D., Hopkinsville.

Thanks is also due to the other active Committee members who lent their interest and support.

R. Glenn Greene, M.D., Chairman

Report of the President

Topic II—Continuing Medical Education—Only

The most frequent arguments I hear against continuing medical education are: 1) That we are already doing it through journal reading, committee and staff meetings, listening to tapes, and attending seminars; 2) That it is too costly in time and dollars; 3) That it doesn't really make us any better physicians; and 4) That requiring it for re-registration of the license is intolerable. All of these arguments have merit. Yet there are many physicians in the Commonwealth who do not keep abreast of newer concepts and treatments and hence are not giving their patients the best treatment available. We need to help these physicians (and to some extent this includes all of us) obtain this information at a reasonable cost, at a reasonable proximity to their practice, and at a reasonable time.

I hope the Association will continue to work on this

problem until all physicians will want to participate instead of feeling they are coerced to do so. Whatever programs are offered, they should try to meet the specific needs of physicians in their own particular locale, and standards don't necessarily need to be the same for every course. The Board of Medical Licensure has not pursued its plan for mandatory CME as a result of your objection, but we still have an obligation to ourselves and our patients to do it on a voluntary basis.

Report of the Chairman, Board of Trustees

Special Report C Only

Resolution L, adopted during the 1976 session of the KMA House of Delegates, committed the Association to the concept of voluntary participation in continuing medical education activities. As an indication of the degree of voluntary efforts by physicians, KMA was directed to evaluate and record the CME programs offered to, and completed by, members.

The quality of CME programs offered is generally assured by the sponsoring organizations. Many national specialty groups routinely offer a series of courses for their members, as well as recertification examinations, self-assessment tests, and other specific programs. The American Medical Association seems to have achieved universal recognition for its accreditation of CME efforts, and both AMA and national specialty groups have developed processes to delegate accreditation to local levels. This is a logically sound process. In developing a records keeping system, it therefore seemed appropriate to pattern the reporting categories on the AMA's Physician's Recognition Award outlines. This format was also chosen because of its similarity to the reporting requirements used by other records keeping organizations.

The operation of this records keeping system was publicized in *The KMA Journal*, the "Communicator," the bulletins of the Fayette County Medical Society and Jefferson County Medical Society, along with two special mailings to the membership. In addition, the Kentucky Academy of Family Physicians was contacted, and agreed to supply KMA with a summary of the CME reports of its members.

A major thrust of this first year of records maintenance was to make the program most convenient for the membership. Members were asked to report their CME efforts from September, 1976, to August, 1977.

A summary of the information reported follows:

Reporting Period: 9/76 - 8/77 (or one year)

Number of Eligible Members: 3262

Number of Responses: 913

Percent Responding: 28% (0.279)

Average Hours/Physician: Total - 103

| Categories | Average | Total Hrs. Reported |
|------------|------------|------------------------|
| I | 40 (39.54) | 36102 |
| II | 10 (9.83) | 8977 |
| III | 18 | 16446 |
| IV | 9 (8.519) | 7778 |
| V | 27 | 24809 |

This information seems to show that, on an average, physicians are completing more hours in CME than is required for the Physician's Recognition Award. As reported, the information also seems to indicate that the bulk of hours are received in Category I, AMA-accredited meetings; and Category V, non-supervised CME activities. Categories II and IV, CME meetings with non-accredited sponsorship; and papers, publications and exhibits, were reported with about an equal occurrence; and Category III, medical teaching, was reported as the third most often occurring activity.

This information may not present a true picture of CME activities, because of the nature of the report form and the reporting requirements. True AMA-accredited Category I programs, for example, are only those which meet a set of specific AMA guidelines, have been formally established, and have been reviewed and approved by AMA. Some individuals reported as many as 200 Category I hours, whereas some reported no hours in this Category. Either occurrence is possible, but unlikely. Likewise, very few hours were reported by all physicians for time spent in consultation, yet many practitioners spend a bulk of their professional time in consultations.

While the data may not be valid, they do tend to substantiate that the physicians reporting are active in CME. Although the importance of hours spent in each category varies from individual to individual, obviously quite a bit of time is spent. The information reported might be further questioned by the fact that only 28% of the membership responded. Statistically, this may not constitute a valid number, but experience has shown that a 30% response is generally indicative of the major opinions of the membership, as it relates to other studies the Association has been involved in.

Some conclusions can be drawn from this process. First, if KMA hopes to substantiate voluntary participation in CME, a larger response is quite important. Second, the importance of voluntarily maintaining records needs to be understood by the entire membership. Next, the categories in which hours are reported need to be more fully explained and understood by those reporting, and individuals who had previously reported CME participation to other organizations should, nevertheless, reply to the KMA system.

Obviously, the KMA records cannot be as specific or as correct as other more formal processes, but more efforts should be undertaken to direct the attention of the membership to this process in keeping with the direction of the House of Delegates.

Recommendations, Reference Committee No. 2

The Reference Committee reviewed and approved the combined reports of the Continuing Medical Education Committee and the referred sections of the Reports of the President and the Chairman of the Board of Trustees and commends them collectively for their efforts and concerns regarding Continuing Medical Education. The Reference Committee wishes to urge greater effort on behalf of the Association in assisting component societies with the planning and approval processes for Category I, Continuing Medical Education.

The Reference Committee recommends that the Report of the Continuing Medical Education Committee

and the referred sections of the Reports of the President and the Chairman of the Board of Trustees be accepted.

Mr. Speaker, I recommend the adoption and implementation of this section of the report.

(The motion was seconded and carried.)

Report of the Cancer Committee

The Cancer Committee of the Kentucky Medical Association has met at two- and three-month intervals throughout the year with great interest at each meeting. Reports have related to:

(1) The follow-up manual for the treated cancer patient by the Commission on Cancer of the American College of Surgeons,

(2) The status of the Ephraim McDowell Network of the University of Kentucky,

(3) The estrogen receptor program, being carried out both at the University of Kentucky and the University of Louisville,

(4) The two-year cancer study at the University of Kentucky, in which in 1973 there were 78 cancers of the cervix, 142 lung cancers, and 90 breast cancers. In 1974 there were 176 cervical cancers, 141 lung cancers, and 68 cancers of the breast.

Reports have been made at each meeting regarding the Breast Cancer Screening Program with mammography and concern has been expressed repeatedly regarding the risk of irradiation. Doctor Maruyama, particularly, has presented reports on this subject. He has recommended strongly that every x-ray machine used in the state have regular testing to determine the amount of radiation dosage being given. The Committee recommends this procedure. This is now being arranged and is available through the Department for Human Resources.

The Radiation Oncology Program of the University of Kentucky, which has been designated as a Special Cancer Center by the National Cancer Institute, has received a special commendation.

Notations and appreciation have been expressed for a number of meetings relating to cancer arranged in the state in the past year. The Breast Cancer Symposium held at the University of Louisville on February 24 and 25, 1977, was of special importance. The nurses' programs, including one on cancer of the lung, were of particular value.

Note has been made of the attempts to form task forces for cancer detection and cure at the University of Kentucky, at the University of Louisville, the American Cancer Society and even through the Cancer Committee of the Kentucky Medical Association. Efforts will continue to be made by this Committee to correlate these activities.

Consideration has been given to Laetrile, and a special report was prepared by Doctor Sanders for *The KMA Journal*. The Committee recommends continued experimental work with this material and that clinical data be obtained as soon as possible.

Reports from the American Cancer Society, especially relating to the Public Education Committee and the Professional Education Committee, have been valuable. The Cancer Society will sponsor a program, "Urologic

Cancer," November 4 and 5, 1977, in Louisville, Kentucky, with internationally known speakers. This is recommended to all members of the KMA. Programs for and by the nursing associations have been received with great interest.

The Committee is particularly pleased that a number of one-page articles have been accepted for publication in *The KMA Journal*, which we believe are of importance and to the point. It is hoped that other articles, which have been promised, will be submitted as they become available. These relate particularly to environmental causes of cancer, and of the estrogen receptor programs at both Universities, and their availability for patients throughout the state, etc.

A special Subcommittee has studied further the Pap smear program in the state and believes that increasing cooperation will follow between the state Department for Human Resources, the American Cancer Society and the Kentucky Medical Association.

The Cancer Committee of the KMA feels that it is developing increasing value in its place as a clearing house for the multiple cancer programs throughout the state. It is hoped that it will give reasonable and intelligent comments on subjects of the day, and that it will encourage the dissemination of knowledge and the increasing efficiency in the treatment of cancer.

This report is respectfully submitted on behalf of the members of the KMA Cancer Committee, who are as follows: William Christopherson, M.D.; E. Allen Griggs, M.D.; William B. Haley, M.D.; C. Hernandez, M.D.; A. Joe Hiller, M.D.; Yosh Maruyama, M.D.; Joseph Milburn, M.D.; J. D. Miller, M.D.; Condict Moore, M.D.; Lynn L. Ogden, M.D.; Warren H. Proudfoot, M.D.; Ben F. Roach, M.D.; Charles R. Sachatello, M.D.; George B. Sanders, M.D.; Karl H. Strand, M.D.; Paul G. Young, M.D.; and Ex-officio members: Jane Younger, R.N.; Wayne B. Miller; and Charles E. Tucker, M.P.H.

Laman A. Gray, Sr., M.D., Chairman

Recommendations, Reference Committee No. 2

The Reference Committee commends the Cancer Committee for its report and recommends its acceptance. The Reference Committee wishes to call particular attention to the need to conduct regular testing programs designed to calibrate the radiation dosage for each x-ray machine, including diagnostic mammography equipment, in the state. The Reference Committee also notes that it was the intention of the chairman in his report on Page 16.3, Paragraph 1, to indicate that the second sentence applied only to one-page scientific articles on cancer appearing in *The KMA Journal*.

Mr. Speaker, I move the adoption and implementation of this section of the report.

(The motion was seconded and carried.)

Report of the Hospital Committee

The Kentucky Medical Association Hospital Committee met May 18.

The Hospital Committee continued to work this year on the development of both a simplified in-hospital appeals mechanism for hospitals with small medical staffs,

as well as a voluntary non-binding arbitration mechanism whereby individuals who had exhausted the various methods of appeal within the hospital structure could call on KMA for additional comment. The Committee is most appreciative of the assistance we received from KMA Legal Counsel in the development of these mechanisms. The Committee is hopeful that once these mechanisms have been finalized that they will be given wide dissemination to both physicians and hospitals throughout the state.

The Committee heard a report on the activities of the dry-run teams which were set up in 1962 to help hospitals seeking accreditation for the first time to prepare for visits from the Joint Commission on Accreditation of Hospitals. Experienced physicians, hospital administrators, medical records librarians, and nursing service supervisors have served faithfully on these teams the past 15 years and, we feel, provide a most beneficial service.

With regard to the Joint Commission on Accreditation of Hospitals, there was some discussion held by the committee concerning the way in which some accreditation visits have been handled in the past and the attitude of the accreditation teams. It is our understanding that some hospitals were asked to conform to standards which had not yet been put into effect and that in some instances, criticism was leveled over inconsequential items. Although the Committee does not feel that this problem is widespread, we are hopeful that it is not becoming a trend.

The subject of health care costs was discussed in some detail by your Hospital Committee. We were pleased to learn that the Kentucky Medical Association has appointed a Council on Health Care Costs to determine what, if any, action can be taken to stabilize the rapidly escalating cost of health care today. The Committee was pleased to learn that hospitals in the state of Kentucky are pursuing innovative cost-saving measures such as sharing facilities and services in an effort to hold down costs and the committee is hopeful that such measures will continue to gain acceptance and grow in effectiveness throughout the state.

The Chairman wishes to thank the membership of this Committee and the representatives from the Kentucky Hospital Association who have met with us for their help and participation.

Royce E. Dawson, M.D., Chairman

Recommendations, Reference Committee No. 2

The Reference Committee reviewed the report of the Hospital Committee and recommends its approval.

Mr. Speaker, I recommend the adoption of this section of the report.

(The motion was seconded and carried.)

Report of the Emergency Medical Care Committee

Your Emergency Medical Care Committee has been extremely active this year and its major endeavor was to again plan and implement the 7th Annual Emergency Medical Care Seminar which was held May 25-26 at the Ramada Inn in Louisville. This meeting continues

to enjoy good attendance and 357 people registered for the meeting this year.

As a result of the demand from last year, two afternoons were devoted to the presentation of a Basic Life Support Program given by the American Red Cross. The Program is given in such a way as to enable participants to become certified in Basic Life Support upon successful completion of the practical training. The Committee is deeply indebted to the many volunteer instructors who participated in presenting the course. Response to that segment of the program was again extremely favorable, and we are very pleased to have been able to make it a part of the seminar.

The Committee is also indebted to the number of physicians from around the state who give freely of their time to come and serve as faculty members on the program. The small registration fee charged by the Committee covers the cost of meals and other promotional expenses and enables us to allow many people to attend.

We were pleased to have as featured luncheon speakers, Gerald B. Shaftan, M.D., of New York, and George R. Gay, M.D., of Mendocino, California. Both of these physicians made outstanding contributions to the success of the meeting.

This year we were fortunate to have the Military Assistance to Safety and Traffic (MAST) unit from Fort Campbell, Kentucky display with us. There was considerable interest in the air ambulances and the committee feels that Kentucky is extremely fortunate to have two such services operating in the Commonwealth. In addition, the Committee has been impressed with the professionalism shown by the Army in setting up and implementing the service.

This year's program was accredited for continuing education credit by the American Medical Association; Kentucky Chapter, American College of Emergency Physicians; the Kentucky Academy of Family Physicians; the Kentucky Dental Association; the Kentuckiana Chapter, Emergency Department Nurses Association; and the American Registry of Emergency Medical Technicians. The Committee enthusiastically recommends that the Seminar be held again next year with the Emergency Medical Care Committee being the coordinating agency.

Other areas of discussion by the Committee this year included a discussion of progress of the statewide Emergency Medical Services System in Kentucky. The Committee was pleased to learn that a considerable amount of progress has been made in the past few years in this area. Emphasis has been on manpower training, developing and coordinating communications equipment and acquiring vehicles. The state EMS Program has acted as coordinator for the various local EMS Programs and has for the most part enjoyed a high degree of acceptance.

Two communications control centers are being set up; one in Louisville, and one in Lexington. The purpose of the centers is to establish EMT-to-physician communication which will help determine which hospital facilities should be used in certain circumstances.

The Committee learned that all 9 Kentucky EMS regions are being asked to submit critical care problems in order to develop protocols. The protocols are being developed to help identify problem areas within the

system. The Committee expressed some concern that such protocols might be interpreted as standards of care rather than guidelines. We were assured by the representatives of the state EMS division that the agency is well aware of this possibility and are planning to develop the protocols in such a way as to prevent that misinterpretation.

The members of the Committee have given a considerable amount of time and effort this year, and I would like to express my sincere appreciation to them for their dedicated interest in the area of emergency medical health care.

Charles E. Webb, M.D., Chairman

Recommendations, Reference Committee No. 2

The Reference Committee reviewed the report of the Emergency Medical Care Committee and wishes to commend it for an excellent job. The Reference Committee also wishes to recommend that the Association publicly commend the Military Assistance to Safety and Traffic (MAST) unit from Fort Campbell, Kentucky for the services to civilian patients requiring emergency transportation and care.

We recommend acceptance of the Emergency Medical Care Committee Report.

Mr. Speaker, I move the adoption and implementation of this section of the report.

(The motion was seconded and carried.)

Report of the KMA Interspecialty Council

The Interspecialty Council has not had an opportunity to meet this past year. However, a meeting is tentatively planned for later in 1977. In November of 1976 an informative booklet was forwarded to all the members of the Council regarding the services now available to the specialty groups through the KMA office.

The Interspecialty Council has been active in improving communications between its membership and the KMA. The KMA Leadership Conference held in Lexington in July 1977, which dealt with improving communications in the Association, was well attended by members of the various specialty groups.

Although the Council is not currently active in a CME program, it expects to begin working more closely with the Association to assist them with their voluntary CME program which was implemented this past spring.

As Chairman of the Interspecialty Council, I will continue to encourage all Council members and their groups to be active in the Association and urge them to utilize the services now offered by the KMA.

I appreciate the efforts that the members of the Council have taken and look forward to working with them in the future.

Richard D. Floyd, M.D., Chairman

Recommendations, Reference Committee No. 2

The Reference Committee reviewed and approved the report of the Interspecialty Council.

Mr. Speaker, I move the adoption of this section of the report.

(The motion was seconded and carried.)

Resolution P

Pennyrile Medical Society

WHEREAS, numerous recommendations presented in this booklet ("Hospital Regulation: A Report of the Special Committee on the Regulatory Process," published by the American Hospital Association, 1977) fall into the category of pitting physicians and hospitals against each other, and

WHEREAS, physicians and hospitals alike should be working together to remove or modify some of the rules that affect both organizations, and

WHEREAS, these differences in philosophy between the American Medical Association and the American Hospital Association should be discussed in joint committee and agreed upon jointly before either the AMA or AHA approves a committee report that affects both organizations, and

WHEREAS, physicians of the Commonwealth of Kentucky are concerned about the recommendations emanating from such a prestigious organization as the AHA and offer the following Resolution:

"RESOLVED, that the Kentucky Medical Association go on record as opposed specifically to recommendations No. 1, 3, 8, 10, 11 and 12 of the above report and recommend that this be brought to the attention of the AMA House of Delegates through our Kentucky Delegation with the recommendations that improved communications and improved joint committee activities be developed between the AMA and AHA so that the two national organizations can more closely work in harmony and point out both to the Congress and the American public what deleterious effects various laws and regulations are or have on health care without further dividing physicians and hospitals and without trying to add to the burdensome amount of regulations that have already been imposed on both hospitals and physicians."

Recommendations, Reference Committee No. 2

The Reference Committee, after hearing testimony in support of Resolution P, recommends its adoption, in principle, and its referral to the Executive Committee for the development of complementary information regarding the specifics of recommendations No. 1, 3, 8, 10, 11 and 12 of the Hospital Regulation Report, in a way that permits transmission of the Executive Committee's position reflecting the intention of Resolution P to the American Hospital Association in a timely fashion, and to the American Medical Association House of Delegates prior to its December, 1977 meeting.

Mr. Speaker, I move the adoption and implementation of this section of the report.

(The motion was seconded and carried.)

Resolution R

KMA Board of Trustees

WHEREAS, Kentucky's two medical schools will operate now or in the future their own teaching hospitals, and

WHEREAS, the University of Kentucky has operated its hospital effectively on behalf of its education and patient care program in the Commonwealth, and

WHEREAS, institutional control of teaching hospitals is an important and necessary management arrangement in order that these institutions may properly carry out their missions, and

WHEREAS, a single corporation not under the control of the parent University or its medical school would compromise the proper and appropriate merger of education, research and patient care programs, and

WHEREAS, such a plan may not be compatible with new regulations of the Joint Commission on Accreditation of Hospitals, and

WHEREAS, both University Presidents have publicly expressed serious concern or opposition with this plan, now therefore be it

RESOLVED, that Governor Carroll and the Council on Higher Education be urged not to adopt a single hospital board plan for the two institutions but rather support a plan for a board under University control for each institution.

Recommendations, Reference Committee No. 2

The Reference Committee heard testimony uniformly in favor of Resolution R and wishes to recommend its adoption.

Mr. Speaker, I move the adoption of this section of the report.

(The motion was seconded and carried.)

Mr. Speaker, I move the adoption of the Report of Reference Committee No. 2 as a whole.

(The motion was seconded and carried.)

Mr. Speaker, I would like to thank the members of the House of Delegates and the members of this Reference Committee for their help and careful deliberation in the matters brought before this committee and Mrs. O'Brien for her help in preparing the report.

REFERENCE COMMITTEE NO. 2

Peter P. Bosomworth, M.D., Lexington, Chairman
Richard K. Jelsma, M.D., Louisville
W. E. Kozee, M.D., Ashland
William E. Pearson, M.D., Owensboro
R. D. Pitman, M.D., Williamsburg

REFERENCE COMMITTEE NO. 3

*James A. Baumgarten, M.D., Owensboro
Chairman*

Reference Committee No. 3 considered the following reports and resolutions:

17. Report of the Maternal Mortality Study Committee

21. Report of the Committee on Occupational Health and Environmental Quality

25. Report of the Committee on National Legislative Activities

26. Report of the Committee on State Legislative Activities

36. Report of the Committee on Physicians' Health

40. Report of the Committee on Maternal and Child Health

1. Report of the President; the entire section numbered Topic IV—Liability Insurance, beginning on Page 1.4 and ending on Page 1.5, *only*

Report of the President; the entire section numbered Topic V—National Health Insurance, beginning on Page 1.5 and ending on Page 1.6, *only*

5. Report of the Chairman, Board of Trustees; Special Report B—Liability Insurance, *only*

Resolution A—Radiologic Operators Regulations (Warren County Medical Society)

Resolution B—Department for Human Resources Regulation 902-KAR-105-040 Radiology Operation Certification (Garrard County Medical Society)

Resolution D—Confidentiality of Peer Review Proceedings (Jefferson County Medical Society)

Resolution E—Patients Compensation Fund, KMA Insurance Company (Jefferson County Medical Society)

Resolution F—Full Disclosure by Insurance Companies (Jefferson County Medical Society)

Resolution I—Physician Laboratories (Grady Stumbo, M.D., Delegate, Floyd County)

Resolution N—Laboratory Regulations Pursuant to K.R.S. 333 (Pennyriple Medical Society)

Resolution O—Physician Members on Local Boards of Health in Kentucky (Pennyriple Medical Society)

Resolution Q—Kentucky Medical Insurance Company (KMA Board of Trustees)

Report of the Maternal Mortality Study Committee

The Maternal Mortality Study Committee meets several times during the year to discuss and classify maternal cases that have ended in maternal death. When reviewing the cases, the Committee invites the physician in question to be in attendance to assist the Committee. In the past this has proven to be ineffective and in most cases the review is performed without the physician in question being in attendance. The Committee has been given permission by the Board to study the possibility of using a conference call which links the Committee members and the physician, whose case is being reviewed, together by phone. This procedure would give the Committee the opportunity to obtain the maximum amount of information and only cause the individual physician the minimum of inconvenience. Hopefully, this will encourage more physicians to assist the Committee in its research.

As in the past, the Committee will continue to publish its findings in *The KMA Journal* to keep the membership informed of problems that could arise during pregnancy and birth. I would like to also express my appreciation to the Committee members for the services they have rendered.

John W. Greene, M.D., Chairman

Recommendations, Reference Committee No. 3

The Report of the Maternal Mortality Study Committee was reviewed and discussed by Reference Committee No. 3.

It is urged that the conference call procedure referred to in this report be instituted at the earliest possible date. It is further urged that attendance by the

physician who cares for the patient also be strongly encouraged.

Reference Committee No. 3 recommends that this report be accepted.

Mr. Speaker, I move the adoption and implementation of this section of the report.

(The motion was seconded and carried.)

Report of the Committee on Occupational Health and Environmental Quality

Two KMA committees were combined during the 1976-77 Associational year, those being the Committee on Occupational Health and the Committee on Environmental Quality, to form the new Committee on Occupational Health and Environmental Quality since the duties of these committees were related.

The Committee individually has maintained an interest in environmental quality and occupational health matters throughout the Associational year although little formal or documented activities were undertaken. These concerns are dominant in many aspects of our daily lives. A confrontation of each of them would be a simple impossibility; however, it is imperative that we, as physicians, do register our concern because of our unique position as scientists and citizens.

Even though concerted action by this Committee or even the Association may not have a recognizable effect on any of these issues, our sincere interest cannot help but at least bring attention to the given problems.

L. James Black, Jr., M.D., Chairman

Recommendations, Reference Committee No. 3

The Report of the Committee on Occupational Health and Environmental Quality was reviewed and discussed by this Reference Committee. The Reference Committee recommends that this report be accepted, but would suggest that the Committee be encouraged to meet periodically as needed to discuss the problems of occupational health and environmental quality in the state of Kentucky.

Mr. Speaker, I move the adoption and implementation of this section of the report.

(The motion was seconded and carried.)

Report of the Committee on National Legislative Activities

In the minds of some segments of the public and some of our legislators, health, or medical care, is simply "big business." As a business, the purpose of medical care nationally may be basically seen as "the best of all for everyone," or the coordination of resources to most economically use federal health dollars, whereas physicians traditionally are concerned mostly with the quality that those dollars will buy.

As legislative activities this year have indicated, it is imperative that organized medicine become concerned not only with quality, because it is being forced to justify its position with regard to costs and must lend an ear to the consumer's voice. The fact that physicians are the only group that can practice medicine is no longer the sole determinant of how medicine is to be practiced.

A good example of this is the so-called "Medicare-Medicaid Reform Act" proposed by Senator Herman Talmadge (D-Ga.). The AMA has presented extensive oral and written testimony on this particular piece of legislation, the major impact of which is directed toward cost containment. The bill does propose some affirmative changes to the administration of both these programs, but a primary thrust is directed at financing. KMA has provided input to the AMA and to our Congressmen throughout the year on this bill, as it has on the President's Hospital Cost Containment Bill, urging that neither of these pieces of legislation overly emphasize financing to the detriment of quality, and it is felt that our arguments have had some effect.

These same arguments have application to the various National Health Insurance proposals now before Congress, and H.R. 1818 (S. 218), the AMA bill, is gaining some support. The Congress, we believe, has come to the consensus that the nation simply can't afford an indepth comprehensive type of NHI program such as proposed by Senator Edward Kennedy (D-Mass.). Without relating to the controversy that has surrounded the AMA's bill, it is important to point out that in the several contacts made with Kentucky's Congressional Delegation throughout the year, KMA's Officers were repeatedly urged to adopt and seek support for a medicine-backed NHI proposal if any conservative influence is to be seen in ultimate NHI legislation.

The majority of KMA's national activities consisted of relaying our views on the previously mentioned proposals and others to our Congressmen and their staffs, in providing comments on proposed federal regulations, and in supporting AMA views in communications with Kentucky Congressional representatives and committee chairmen.

The major pieces of legislation that KMA expressed opinions on were the Clinical Laboratories Improvement Act, the Medicare-Medicaid Reform Act, the Medicare-Medicaid Fraud and Abuse proposal, Federal Trade Commission amendments, and the Hospital Cost Containment Act.

Views on administrative regulations were submitted relating to confidentiality of records under the Social Security program, various proposed Medicare regulatory amendments, and the FDA's action in banning sale and use of saccharin.

One major situation that KMA was heavily involved in related to the publication by the Department of Health, Education and Welfare of the names of physicians who earned over \$100,000 in 1975. As was widely known, the list was highly inaccurate and KMA documented inaccuracies published for all of the individuals and groups listed in Kentucky and transmitted this information, along with protests, to the Department of HEW, to Kentucky's Congressmen, and to the state's news media.

Input into the administration's NHI activities was undertaken through Harvey I. Sloane, M.D., the Mayor of Louisville, who was named to serve on the President's NHI Advisory Committee. Doctor Sloane was provided with a paper describing KMA's views on NHI, which strongly recommended a conservative approach.

The Washington Dinner was held in mid-May and was quite successful. Visitations were scheduled all day

before the Dinner and each Congressman was visited at least once in his office, and most were seen twice by one of the KMA groups. In addition, an "official" group visited each Congressman on a timed schedule and related KMA views on current legislative issues, which were listed on a background paper left in each office. A major item of discussion was the Medicare resolution adopted by the special session of the KMA House of Delegates in February, and KMA's problems and concerns were addressed in depth.

The Dinner, too, was well attended with all Congressmen except one making an appearance, as well as several of the top administrative assistants. In follow-up to the Dinner, it appeared that it was well received by our state's legislators, and they seemed to particularly appreciate the fact that the Dinner activities were nonpolitical. The overwhelming impression given by our Congressmen was that organized medicine must maintain strong involvement in national legislative affairs, in the form of proposing legislation, if it expects to have any influence on forthcoming laws.

While in Washington, KMA Officers and staff were able to attend a separate meeting with HEW officials concerning Kentucky's problems with Medicare. This meeting was arranged by Tim Lee Carter, M.D., who has particular empathy with our problems. This meeting will be addressed in more detail in other reports.

We would urge that KMA's activities in national legislative matters be maintained, and, possibly, even increased, as it has been observed that our input has had some effect. We would also urge every member to become knowledgeable on national legislative proposals and express his views to the Congressman from his district.

Fred C. Rainey, M.D., Chairman

Recommendations, Reference Committee No. 3

The Report of the Committee on National Legislative Activities was reviewed and discussed by the Reference Committee, and we recommend this report be accepted. The Committee is to be complimented for its individual and group activities.

Mr. Speaker, I move the adoption of this section of the report.

(The motion was seconded and carried.)

Report of the Committee on State Legislative Activities

The Committee on State Legislative Activities meets less frequently during the year the Kentucky General Assembly is not in session. Although the Committee has not formally met as of the writing of this report, a meeting is scheduled for the latter part of August, and it is anticipated that an addendum to this report will be submitted.

The Chairman and our staff have been kept quite busy on state legislative matters due to the interim committee system of the Kentucky General Assembly. A great deal of time has been spent in meetings in Frankfort with various committees and individuals regarding health related activities. During the past three months alone, one or more members of the KMA staff have been in Frankfort over 50% of the working days, in

addition to the time of our part-time employee in the Frankfort office of KMA.

KMA has been in the process of preparing for the upcoming session of the Kentucky General Assembly, which is expected to keep us all quite busy actively supporting good health and medical legislation and working against legislation not in the best interest of the profession and the citizens of the Commonwealth.

The Committee on State Legislative Activities continues to exert efforts to maintain adequate communication with all specialty groups. Efforts shall also continue to effectively communicate with all allied groups. We shall continue emphasis on positive legislative programs.

A legislative Key Man System will once again be instituted to aid in the efforts of KMA before and during the Kentucky General Assembly. Efforts will be made to strengthen this system, and we wish to re-emphasize the necessity of physicians responding each time they are called upon to make contact with their Legislators. Without their help and cooperation, the communication system cannot adequately function, and the profession, as well as the citizens of the Commonwealth, will suffer if they fail to function.

We cannot emphasize frequently or strongly enough the absolute necessity of all physicians participating in legislative activities at the local level. We urge all physicians to become interested and active in legislative matters, both with personal time and financial support, and to stay abreast of legislative trends and effectively communicate their opinions to their respective Legislators. It is extremely important for all physicians to maintain good rapport with their Legislators, and even more important for the key physician assigned to each Legislator.

The Committee on State Legislative Activities once again recommends to the House of Delegates that the following policies be continued: (1) All state legislative proposals be coordinated by and channeled through the Committee on State Legislative Activities. (2) The composition, authority, and function of the Quick Action Committee be retained. (3) The composition, priority, manner, and time of introduction of state legislative proposals be left to the discretion of the Committee on State Legislative Activities. The above policies are not new; rather they are the ones under which we are currently operating. However, they are felt to be extremely important, and I would be pleased to appear before any committee or group to further discuss them if desired.

It should be pointed out once again that while our staff personnel are in Frankfort for the Kentucky General Assembly, they are responsible only to their immediate superiors and not to individual members of the Association. Staff are all extremely hardworking, very cooperative, and most dedicated. Any complaint relative to the state legislative program or its administration should be directed to the State Legislative Committee Chairman and not to the staff. Our staff legislative representatives have been instructed not to carry out any recommendations or suggestions presented to them by anyone without first the approval of this Committee or its proper representatives. There will be two or more staff personnel devoting their attention to state legisla-

tive matters when the Kentucky General Assembly is in session.

I wish to express appreciation to my Committee members, the Quick Action Committee, the Board of Trustees, and the House of Delegates for their continued support and understanding.

Carl Cooper, Jr., M.D., Chairman

ADDENDUM

The Committee on State Legislative Activities met on August 25 to discuss legislation which has been drafted for introduction into the 1978 session of the Kentucky General Assembly and legislative issues expected to arise.

The Committee members also discussed how they could be more effective in reviewing legislative proposals and activating the Key Man System when it is needed, as well as communicating with the KMA membership.

Future activities of the Committee on State Legislative Activities will be dictated in large part by the actions of the Kentucky General Assembly in 1978.

Recommendations, Reference Committee No. 3

The Report of the Committee on State Legislative Activities was reviewed by the Reference Committee, and the Committee is to be commended for its large volume of work.

There is a majority report and a minority report on this section. The majority report recommends its acceptance.

Mr. Speaker, I move the adoption and implementation of the majority report.

(The motion was seconded and carried.)

Minority Report of Reference Committee No. 3

The minority opinion of Reference Committee No. 3 accepts the Report of the Committee on State Legislative Activities, but feels that a wider spectrum of input should be sought in the initial discussion of all legislative matters prior to a decision being reached.

Report of the Committee on Physicians' Health

The Committee on Physicians' Health has met two times this Associational year, in addition to the informal functions relating to impaired physicians by correspondence and phone call.

It has been indicated to the Committee that there are a number of impaired physicians who might be helped, but the major difficulty we have experienced is in documenting the problem. Often the impaired physician won't acknowledge his problem and agree to accept help. The Committee cannot act or be of help unless someone is willing to outline the problem to the patient or to the Committee.

Your Chairman was privileged to attend a Conference on the Impaired Physician sponsored by the AMA in February. Although it did not provide a great deal of answers, the Conference was helpful to the extent that it addressed the programs for impaired physicians in other states and identified some major related items.

Georgia, Ohio, and California apparently have fairly well organized programs, including mechanisms to deal with the inept or unethical physician.

One point raised was that closer attention perhaps

should be paid to the admission and continuance of medical students who have questionable tendencies that could relate to future impairments. Identification of the ideal student remains a difficult undertaking, of course, but certain students and residents should be released from training when their behavior indicates serious and chronic personal problems.

Another interesting point that was addressed was on confrontation techniques where it was acknowledged that the major difficulty, as mentioned earlier, was getting people to report "sick" physicians, and the most likely reason for this hesitancy is that the physician's license might be jeopardized, he might be put in an embarrassing position, or he might even lose income for a time.

The AMA has developed model legislation to deal with the impaired physician. However, many feel that formal legal solutions, possibly controlled by nonphysicians, would not be helpful.

Most information available at the Conference emphasized the problems that your Committee is now confronting. In this context, it is important to underscore the fact that this Committee seeks to help in a supportive, nonpunitive fashion. We would suggest that any physician, sick with an illness that affects his ability to give good care, should be approached directly by a friendly local physician associate together with one or two other physicians and, hopefully, close family members. Evaluation and treatment should be suggested, along with encouragement to the impaired individual to recognize his problem. Many problems can be solved locally. But if this is not effective, then the Committee will accept a request to become actively involved.

Many do not know of the availability of this Committee on Physicians' Health. Because of our concern for the impaired physician and his patients, we will now write to County Society Presidents and to hospital administrators and medical staff presidents to inform them of our function and availability.

As a preventive move we will ask our medical schools to include a brief presentation by one of our Committee members during the orientation for new students at the start of a school year. We wish to begin this effort at once.

It was the Committee's feeling that it needed better geographic representation. We are pleased that Martin Gebrow, M.D., Lexington, and Bruce Snider, M.D., Covington, were selected and agreed to serve. In addition to these individuals, I would like to acknowledge the efforts of the initial Committee members, George Brockman, M.D., Greenville, and Charles C. Smith, M.D., Louisville.

David L. Stewart, M.D., Chairman

Recommendations, Reference Committee No. 3

The Report of the Committee on Physicians' Health was reviewed by Reference Committee No. 3, and we recommend it to be accepted. We wish to commend Doctor David Stewart and his Committee for their excellent work and timely report. The Committee on Physicians' Health should be encouraged to continue to seek help for the impaired physician as outlined in the Report of the Committee and should also be encouraged in its plan to ask the medical schools in the State to include a brief presentation by one of its Com-

mittee members during the orientation for new students at the start of the school year.

Mr. Speaker, I move the adoption and implementation of this section of the report.

(The motion was seconded and carried.)

Report of the Committee on Maternal and Child Health

Nineteen Seventy-Six and 1977 have been busy years for the Maternal and Child Health Committee. The effort of the Committee has been directed towards getting approval of interested parties of the "Task Force Report: Improved Maternal and Newborn Care Through Regionalization." This was originally drafted in the summer of 1976.

The National Foundation March of Dimes released to the general public the document called "Towards Improving the Outcome of Pregnancy Care" in the summer of 1976. This document spells out very precisely how perinatal care should be regionalized. It goes into considerable detail about material, staff, and physical facilities necessary to accomplish such regionalization.

The Maternal and Child Health Committee appointed a Task Force with four representatives from the KMA, four representatives from the Academy of Pediatrics, four representatives from the Academy of Family Practice and four representatives from the Kentucky OB/GYN Society, which met in Louisville in July 1976. Over a course of three days with intensive effort, the Task Force formulated a report. This document describes patterns of regionalized perinatal care for Kentucky. The document was completed and approved by the Parent Committee in September 1976. Since that time, the document has been circulated to interested and sponsoring parties.

The general membership of the Kentucky Chapter of the Academy of Pediatrics voted by 6-1 margin to accept the Task Force as principles toward which that organization would strive. The Kentucky Obstetrical and Gynecological Society voted unanimously, at its Annual Meeting in June of 1977, to accept the regionalization document as goals of that society. And finally, in July 1977, the Executive Board of the Academy of Family Practice (Kentucky Chapter) voted to accept in principle the Task Force Report as guidelines toward improving maternal and child care.

At this time, the Committee is pleased to send to the President and the House of Delegates, the revised document and the Preamble, which emphasizes the urgency of this project.

Lay health planners and interested health service organizations have obtained copies of the National Document, and there is good indication from several sources that they will use this document to guide the structuring of rules and regulations concerning the delivery of health care to mothers and children. It was felt that the doctors in the State of Kentucky needed to have a program of their own, which has been endorsed by all responsible parties.

Thus, at this time, the Committee on Maternal and Child Health is pleased to forward a copy of its Task Force Report, which has now been approved by the

above groups, and hopes that the KMA House of Delegates will be able to consider this document for inclusion into official goals and policies of the Kentucky Medical Association.

John L. Duhring, M.D., Chairman

Recommendations, Reference Committee No. 3

Reference Committee No. 3 reviewed the Report of the Committee on Maternal and Child Health. We commend the Committee for its excellent and thorough report, along with the Task Force Report.

Reference Committee No. 3 recommends that this report be accepted.

Mr. Speaker, I move the adoption of this section of the report.

(The motion was seconded and carried.)

Report of the President

Topic IV—Liability Insurance—Only

At the time of this writing, we have a great problem with the recent determination of the Supreme Court of Kentucky that our Medical Liability Insurance Law is unconstitutional. This came as a surprise and as a disappointment to most of us and we are looking at other possible solutions to our predicament right now. The Insurance Commissioner of Kentucky has asked for a reconsideration by the Court and KMA will have some input into the argument before the Court if reconsideration occurs. For the purpose of refreshing the memory of all of us, perhaps it is well to review the reason for KMA asking for legislation in the 1976 Legislature. Some of you have said we did not have a crisis and did not need legislation, but I must remind you that there was a crisis for many people who had their liability contracts cancelled, for those who could renew only at exorbitant rates, and for new physicians who could not purchase it at any price.

The law as passed, we believe, was a good one and would have solved some of our problems. Many excellent legal minds felt it was constitutional. It so happened that the Supreme Court of Kentucky did not, and mostly on technical ground rather than substance. We have not given up yet. If the court does not reconsider its decision and separate the parts that are constitutional, then we will seek alternatives such as forming our own umbrella company or going to the 1978 Kentucky Legislature with a bill containing those parts of the law that now seem to be constitutional. I hope you will continue your Ad Hoc Committee on Professional Liability Insurance or appoint a new one to pursue this.

Recommendations, Reference Committee No. 3

Reference Committee No. 3 reviewed the Report of the President; the entire section numbered Topic IV—Liability Insurance, beginning on Page 1.4 and ending on Page 1.5, *only*, and recommends it be accepted.

Mr. Speaker, I move the adoption of this section of the report.

(The motion was seconded and carried.)

Topic V—National Health Insurance—Only

The official policy of KMA on national health insurance has been to support the AMA Comprehensive Health Insurance concept. This concept is not one of

socialized medicine as many of our members think. It is a method of keeping alive and working a freedom of choice type of medical care delivery. It would make comprehensive medical care available to every citizen. For the working person or those not working who were able to afford it, private insurance would be stressed with employer and employee sharing in the premiums. For the indigent and the unemployed, the federal government would pay the premium. It would still allow free choice of physician and choice of insurance plan.

About 87% of all people in the United States now have some form of health insurance. Exactly what percentage of these who have "adequate" insurance is unknown. The majority do have catastrophic coverage, however. Health care delivery in this country, though not perfect, is the best of any other nation insofar as we can determine and the adequacy of care is also the best. Health systems have been thoroughly studied in many nations and none favorably compares with ours. National health insurance of the Kennedy type, in the opinion of most of us, would be a financial disaster for our nation. It would be a delivery disaster if it is patterned after Medicare and Medicaid. Physicians with whom I have talked would deplore this.

We have no intention of pushing any type of socialized medicine program but we do have a counter proposal in our comprehensive care plan, so let's support it. Physicians have as much desire to see quality medicine at reasonable fees in this country as any citizen, so let's not hold back in making our recommendations known.

Recommendations, Reference Committee No. 3

Reference Committee No. 3 reviewed the Report of the President; the entire section numbered Topic V—National Health Insurance, beginning on Page 1.5 and ending on Page 1.6, *only*, and recommends it be accepted.

Mr. Speaker, I move the adoption of this section of the report.

(The motion was seconded and carried.)

Report of the Chairman, Board of Trustees

Special Report B—Only

Liability Insurance has demanded much of KMA during the past two years to include funds, time, and effort. This report will attempt to summarize the happenings that have taken place during that span of time.

At the 1975 Annual Meeting, the House of Delegates adopted 19 principles they would like to see included in legislation that was to be drafted by the Governor's Hospital and Physicians' Professional Liability Insurance Advisory Committee. KMA had two hard-working members on that Committee—Thomas M. Marshall, M.D. of Louisville, and Ballard W. Cassady, M.D. of Pikeville. Through their influence, a majority report of KMA's principles was included in the Committee's legislative proposal. However, some key matters were not acceptable due to the consensus of the entire Committee, which had serving on it representatives of government officials, Legislators, hospitals, insurance companies, attorneys, etc. One of the key principles we lost was

when mandatory purchase of insurance by all physicians and hospitals was written into the bill. KMA opposed this mandatory aspect and filed a minority report with the Committee, pointing out our opposition to it.

With the Governor's Committee having finalized its legislative package, which became Senate Bill 248, KMA then had to decide whether to go along with it as written or go on our separate way with an entirely different bill. In order that this decision could be made, a special meeting of the House of Delegates was called on February 26, 1976. At the special meeting, the House voted unanimously that Senate Bill 248 be accepted.

The Liability Insurance legislation was constantly in the limelight during the entire session of the General Assembly, but finally passed in the late hours after some amendments and much hassle.

To protect its members, KMA then supported a test suit to test all constitutional aspects of the legislation. The Franklin Circuit Court ruled on September 27, 1976, that: 1) The requirement for mandatory purchase of insurance was unconstitutional; and 2) The state funds could not be used as a backup to the Patients' Compensation Fund. KMA favored the Court's ruling regarding no mandatory insurance, and was hoping the law would be upheld in such fashion. However, the Supreme Court struck down the bill on June 21, 1977, pointing out such things as follows, quoted from the July 13, 1977, Board of Trustees' Minutes.

1) The Supreme Court has elected not to uphold procedural aspects and stated they would be contested only when other litigation presented itself.

2) The Court considered Section 9 relating to confidentiality of peer review proceedings and stated Section 9 was in violation of the Constitution which states a bill must be limited to one subject which should be expressed in its title. Thus, the confidentiality section was struck out on a technical point as interpreted by the Court.

3) The Court went through the Section regarding the Patients' Compensation Fund and held the mandatory requirement of physicians and hospitals carrying \$100,000/\$300,000 insurance coverage was unconstitutional (KMA agreed with this and had so informed the Court).

4) The Court also struck down the section relating to referral to the Licensure Board any physicians who do not comply with the mandatory insurance aspect. The Court then struck down the entire law because it felt that the sections ruled unconstitutional in Section 10 were so interwoven with the remaining sections of the bill that it could not stand alone.

Since the court's decision, KMA has been daily involved in meetings both in Frankfort and in Louisville with numerous groups and their legal counsels in preparing for future steps regarding the Court's decision. KMA has urged the Commissioner of Insurance to petition for a re-hearing primarily on severability of those sections of Section 10 that were held to be unconstitutional and to urge the Court to permit the remaining portions of Section 10 that are constitutional to remain and stand on their own.

The ruling of the Court has prompted much discussion and it is hoped that the Court will accept the petition for re-hearing and let those sections of the

Patients' Compensation Fund that have been ruled to be constitutional remain in effect. This, it is felt, would relieve Kentucky of a crisis possibility.

Should the petition be unsuccessful, discussion was then directed toward the possibility of returning to the next session of the Kentucky General Assembly and introducing legislation containing the portions that the Court indicated to be constitutional. Another choice would be for KMA to take over the physician portion of the Patients' Compensation Fund and secure enough additional financing to go into the insurance business by forming its own umbrella insurance company.

As of the writing of this report, it is not known whether the Court will accept the petition for re-hearing or not, although we are expected to know by Convention time and an update can be presented to you. It is also not known as of this writing whether or not KMA will be taking positive actions toward the formation of an insurance company. Professionals in this field from Chicago have met with the Executive Committee and Board of Trustees during the past few weeks, and again an update, either orally or written, will be provided to you at the Annual Meeting.

As soon as the Court has ruled on the petition for re-hearing, KMA will then have to take some positive steps concerning what we will plan to do about the formation of an insurance company, legislative proposals for the next General Assembly, or seek other alternatives that might be available to us.

Recommendations, Reference Committee No. 3

Reference Committee No. 3 reviewed the Report of the Chairman, Board of Trustees; Special Report B—Liability Insurance, *only*, and also heard additional comments from the Chairman of the Board of Trustees regarding the special assessment and expenditures for professional liability insurance matters.

Reference Committee No. 3 appreciated Doctor Holloway's appearance before the Committee to discuss this Special Report, and recommends it be accepted.

Mr. Speaker, I move the adoption of this section of the report.

(The motion was seconded and carried.)

Resolution A

Warren County Medical Society

WHEREAS, the Department for Human Resources, Bureau for Health Services, has arbitrarily established administrative regulation 902KAR 105:010 that requires medical personnel who take x-rays (regardless how elementary the views) to take a comprehensive exam for registration and certification as a licensed operator, and

WHEREAS, all such personnel are already under the direct supervision of a practitioner fully qualified in the technique of taking x-rays and knowledgeable of the dangers of its potential misuse, and

WHEREAS, the use of such individually trained and supervised personnel allows not only patient safety but the delivering of a needed service at the lowest possible patient cost, and

WHEREAS, the new regulation will of necessity require limiting services in some areas, and require increasing fees in others (by the use of more expensive

personnel) and without increasing either patient safety or quality, and

WHEREAS, this regulation establishes a precedent which many fear will result in the forced registration of every phase of medical assistants that are now trained and supervised by physicians (i.e., simple laboratory procedures, venipunctures to sample blood for laboratory tests, giving simple injections, and other procedures required in the day-to-day practice of medicine), and that will of necessity raise significantly the cost of primary care medicine, be it therefore

RESOLVED, that the KMA Legislative Committee be directed to promote legislation that will rescind the regulation requiring examination and registration of all medical personnel that operate x-ray machines, and promote legislation that will prevent further arbitrary regulations that serve to increase patient medical costs without significant or reasonable justification that it will improve the quality of medical care.

Resolution B

Garrard County Medical Society

WHEREAS, this regulation will escalate the price of medical care to both patient and consumer, and

WHEREAS, an individual practitioner cannot always get trained certified personnel to operate his x-ray equipment in an individual office, and

WHEREAS, this would be a duplicative regulation and is entirely unnecessary as the equipment is already checked by state regulations to protect the public for health and safety, and

WHEREAS, this would curtail practice and also cut down the availability and accessibility to the public, as far as x-ray facilities are concerned, and

WHEREAS, the state legislature had already voted against such regulations and now such a regulation is being imposed upon practitioners by the bureaucracy of the Department for Human Resources, and is not the will of the people, and is not certified by legislative action, now therefore be it

RESOLVED, that the Kentucky Medical Association pursue all reasonable efforts to amend or delete this regulation through appropriate legislative, administrative, or legal channels.

Recommendations, Reference Committee No. 3

Reference Committee No. 3 reviewed Resolution A, Radiologic Operators Regulations, introduced by the Warren County Medical Society, and Resolution B, Department for Human Resources Regulation 902-KAR-105-040 Radiology Operation Certification, introduced by the Garrard County Medical Society, together.

We recommend that Resolution A not be accepted and that Resolution B be accepted because Resolution B more clearly represents the majority opinion of the Reference Committee and those members present to discuss the problem.

Mr. Speaker, I move the adoption and implementation of this section of the report.

(The motion was seconded and carried.)

Resolution D

Jefferson County Medical Society

WHEREAS, the Supreme Court of Kentucky on June 21, 1977 acted to declare Section 9 of Senate Bill 248 unconstitutional, and

WHEREAS, the Supreme Court opinion was based on the fact that the subject matter of Section 9 does not relate to the title of the act which makes it in violation of Section 51 of the State Constitution, and

WHEREAS, it would appear from the Court's opinion that a new Legislative Bill could be passed in the next Legislature with the same provisions as are currently in Section 9, except for the elimination of any reference to PSRO, and

WHEREAS, according to legal opinions from JCAH, Kentucky is one of the very few states without legal protection against the use of hospital peer review records in litigation, and

WHEREAS, this problem of adequate protection for the physicians who are to accomplish medical audits and other types of peer review is essentially a problem for the public, hospital owners, and hospital Boards of Trustees since peer review is accomplished by physicians for the purpose of higher quality care and better hospitals, now therefore be it

RESOLVED, that the House of Delegates instruct the KMA Board of Trustees to prepare new legislation in cooperation with the Kentucky Hospital Association for the 1978 Kentucky General Assembly which can be passed and be acceptable to the Supreme Court as an effective law in this regard, and be it further

RESOLVED, that the KMA, in cooperation with physicians throughout the Commonwealth, act to make it clear to the public and the Trustees of all hospitals that an adequate Confidentiality Law is essentially their problem as much or more than physicians, and if such a law cannot be passed, there cannot and will not be any peer review accomplished in our hospitals.

Recommendations, Reference Committee No. 3

Reference Committee No. 3 reviewed Resolution D, Confidentiality of Peer Review Proceedings, introduced by the Jefferson County Medical Society, and recommends the deletion of the last "Resolved," and that the last word, "and," also be deleted from the first "Resolved," thus ending the resolution with the words, "in this regard." The Reference Committee then recommends Resolution D be accepted as amended.

Mr. Speaker, I move the adoption and implementation of this section of the report.

(The motion was seconded from the floor.)

The Speaker then recognized P. Raphael Caffrey, M.D., Delegate from Fayette County, who made a motion to substitute the following as the second "Resolved" section of the Resolution:

"Resolved, that the Kentucky Medical Association, in cooperation with physicians throughout the Commonwealth, act to make it clear to the public and the trustees of all hospitals that an adequate confidentiality law is their problem as much or more as physicians, and if such a law cannot be passed, adequate peer review cannot be accomplished in our hospitals."

The motion to substitute was seconded from the floor, and passed by a vote of 94 to 63.

Resolution E

Jefferson County Medical Society

WHEREAS, SB248, Section 10, has been declared unconstitutional by the Kentucky Supreme Court, and a petition for re-hearing before the Court is now pending yet not final, and

WHEREAS, the KMA must act now on how they will assist physicians and ultimately patients to resolve the professional liability crisis, since without a suitable Patients' Compensation Fund (PCF), it will be nearly impossible to obtain an "Umbrella Type" insurance policy at a reasonable cost, and

WHEREAS, without a suitable PCF, we may again face the severe crisis of some insurance being cancelled with additional coverage unavailable or new physicians in the state finding it impossible to buy even basic coverage, and

WHEREAS, we realize that the KMA Board of Trustees has discussed the possibility of a KMA owned insurance company and, in fact, have made plans and completed studies toward that end, and

WHEREAS, this Resolution is concerned with making sure that the KMA Board of Trustees has an explicit mandate from the House of Delegates to form a KMA insurance company to replace the PCF if necessary, and

WHEREAS, supporting data accompanies this Resolution to show how many physicians (estimated) are in Kentucky for each class of insurance risk, and how much money would be required from each for capital contributions and premiums to achieve legal and financial stability, if all participated, for a private KMA PCF free from politics and government control, now therefore be it

RESOLVED, that the House of Delegates instruct the KMA Board of Trustees to immediately complete all details, legal requirements, and membership studies so that the KMA Insurance Company (PCF) would be ready and in force within sixty (60) days following the final decision of the Kentucky Supreme Court on the constitutionality of SB248, and/or the final decision of any other court required for the Insurance Commissioner to refund the monies now held by the state Patients' Compensation Fund, and be it further

RESOLVED, that the KMA Physicians' Insurance Company for professional liability protection be declared necessary because:

(a) Those in the higher risk coverage (Class IV and V) would eventually find their premium to a private KMA PCF more reasonable than the premium for an "Umbrella Type" coverage in the open market.

(b) Physicians in the two higher risk groups should be willing to contribute for the first two years of a physician owned fund, an amount equal to what they last paid for "Umbrella Type" coverage when it was available. The total of these two year contributions should be enough to meet the legal and financial requirements of a private KMA insurance company.

(c) Physicians in the lower class risks should be willing to participate in the private KMA PCF, at a reasonable premium and as close as possible to their present assessment for the Patients' Compensation Fund.

(d) A private KMA PCF could and should retain expert legal counsel which would thoroughly investigate every malpractice suit filed in Kentucky for consideration of its merits for further counter legal action. This would be in the best interest of the entire profession and all patients.

Resolution Q

KMA Board of Trustees

WHEREAS, the legislative attempts to solve the umbrella insurance problems in Kentucky have been struck down by the Kentucky Supreme Court, and

WHEREAS, there are strong sentiments within the Kentucky Medical Association to handle the problem ourselves and to form our own insurance company to provide needed umbrella protection, now therefore be it RESOLVED,

1. That the Board of Trustees be authorized and directed to take all necessary preliminary steps to organize a Kentucky Medical Insurance Company authorized to provide professional liability umbrella coverage.

2. That at the same time a campaign organization be established promptly in each of the fifteen Trustee Districts for soliciting endorsements and indications of interest in the Kentucky Medical Insurance Company.

3. That if by December 1, 1977, sufficient endorsements and indications of interest have been received for the Kentucky Medical Insurance Company, that the company be launched and securities and policies be offered to the physicians in Kentucky and the new insurance company be established as the method in the future for solving the umbrella insurance needs of Kentucky physicians.

4. That in the event by December 1, 1977, there are not sufficient endorsements and indications of interest from Kentucky physicians for the new Kentucky Medical Insurance Company, the Board of Trustees is authorized to so determine, and then to direct its attention to supporting legislation in the 1978 Kentucky State Legislature to create a new non-mandatory Patients' Compensation Fund under the best terms for Kentucky physicians as is possible under the circumstances existing at the 1978 Legislature.

5. That the Board of Trustees may modify the deadlines set forth herein as may be necessary under developing circumstances to best serve the achievement of the goals set forth herein, being the successful forming of the Kentucky Medical Insurance Company or in the alternative the achieving of new legislation establishing a Patients' Compensation Fund.

Recommendations, Reference Committee No. 3

Resolution E, Patients' Compensation Fund, KMA Insurance Company, introduced by the Jefferson County Medical Society, and Resolution Q, Kentucky Medical Insurance Company, as introduced by the KMA Board of Trustees, were considered together.

The Reference Committee recommends that Resolution E not be accepted and that Resolution Q, the Kentucky Medical Insurance Company, be accepted with the following addition:

"6. This new Kentucky Medical Insurance Company could retain expert legal counsel which would

thoroughly investigate every malpractice suit filed in Kentucky for consideration of its merits."

Mr. Speaker, I move the adoption and implementation of this section of the report.

(The motion was seconded and carried.)

Resolution F

Jefferson County Medical Society

WHEREAS, it is most difficult or impossible to accurately determine from insurance company records that are available the extent of the Professional Liability Insurance problem, and

WHEREAS, there has been much discussion concerning the cause of the Professional Liability problem considering the number of claims, the amount of money spent on claims, and the amount of money required by law or used by insurance companies, reserves or investments, and

WHEREAS, in some states insurance companies are now required to make full disclosure to the insurance department, and

WHEREAS, it would be most helpful to know accurately the experience of every insurance company as well as perhaps prevent the arbitrary increase in premiums that can't be supported by experience, now therefore be it

RESOLVED, that this House of Delegates instruct the KMA Board of Trustees to seek the advice of the Insurance Commissioner for the Commonwealth of Kentucky in order that a proper law be enacted or regulation written so that all insurance companies writing Professional Liability Insurance in this state be required to provide the Commissioner with full disclosure reports.

Recommendations, Reference Committee No. 3

Reference Committee No. 3 reviewed Resolution F, Full Disclosure by Insurance Companies, introduced by the Jefferson County Medical Society, and we recommend it be accepted.

Mr. Speaker, I move the adoption and implementation of this section of the report.

(The motion was seconded and carried.)

Resolution I

W. Grady Stumbo, M.D.

WHEREAS, in the Kentucky Revised Statutes Chapter 333 pertaining to the licensure of medical laboratories the following language was deleted. "Medical laboratories operated by a licensed physician or a group of licensed physicians, solely and exclusively in connection with the diagnosis and treatment of their own patients. If any referred work is received or performed by such medical laboratories, all provisions of this act shall apply"

WHEREAS, this deleted language was to exclude from this act physician laboratory services for their own patients; therefore be it

RESOLVED, that the KMA House of Delegates direct the KMA Board of Trustees to support the introduction of legislation in the 1978 Kentucky General Assembly to restore the deleted language.

Resolution N

Pennyrile Medical Society

WHEREAS, the Department for Human Resources of the Commonwealth of Kentucky, and its agents, through the Department of Health, have not followed established procedures in implementation of Kentucky Revised Statute Chapter 333, and

WHEREAS, as outlined by the law, the Advisory Council to the Medical Laboratory Licensure Act has not been consulted and instrumental in preparation of the proposed regulations, and

WHEREAS, the Advisory Council, as established by law, has not been a party to the regulations as published, now therefore be it

RESOLVED, that the Kentucky Medical Association advise the Secretary of the Department for Human Resources, that established procedures have not been fulfilled and the regulations as published do not reflect the desires, needs and concerns for our patients throughout the state, and be it further

RESOLVED, that the Kentucky Medical Association request the Secretary of the Department for Human Resources to delay any further implementation in regard to KRS 333 until this matter can be again addressed at the next session of the Kentucky General Assembly.

Recommendations, Reference Committee No. 3

Resolution I, Physician Laboratories, introduced by Grady Stumbo, M.D., Delegate, Floyd County, and Resolution N, Laboratory Regulations Pursuant to K.R.S. 333, introduced by the Pennyrile Medical Society, were considered together by Reference Committee No. 3.

Because of the discussion before the Committee, and the supplemental information given by the Chairman of the Board of Trustees, Reference Committee No. 3 recommends that Resolution N not be accepted. We recommend Resolution I be accepted with the deletion of the words, "the introduction of," from the second line of the "Resolved," making the "Resolved" read as follows:

"RESOLVED, that the KMA House of Delegates direct the KMA Board of Trustees to support legislation in the 1978 Kentucky General Assembly to restore the deleted language."

Mr. Speaker, I move the adoption and implementation of this section of the report.

(The motion was seconded from the floor.)

A motion was then heard from the floor, which was duly seconded, that for clarification purposes, the deleted language itself be included in the Resolved section of the Resolution, thus causing it to read as follows:

"Resolved, that the KMA House of Delegates direct the KMA Board of Trustees to support legislation in the 1978 Kentucky General Assembly to restore the deleted language of K.R.S. 333; i.e., 'Medical laboratories operated by a licensed physician or a group of licensed physicians, solely and exclusively in connection with the diagnosis and treatment of their own patients. If any referred work is received or performed by such medical laboratories, all provisions of this act shall apply.'"

On a call for the vote, the motion carried.

Resolution O

Pennyrile Medical Society

WHEREAS, it has recently been brought to the attention of this society that physician representation on local boards of health is under consideration for change in the make-up of local boards of health, and

WHEREAS, the Pennyrile Medical Society feels very strongly that physician representation on boards of health must be maintained, now therefore be it

RESOLVED, that the current membership of local boards of health with regard to physician membership not be changed, and be it further

RESOLVED, that this Association strongly urges its physician members who are named to local boards of health to attend meetings regularly and if said physician member is unable to attend, it is strongly urged that he voluntarily resign his position in favor of a physician who will attend, and be it further

RESOLVED, that the House of Delegates authorize the Board of Trustees to support this position with the Interim Committees of the Legislature, the Department for Human Resources, the Governor and the Legislature.

Addendum: Regarding finances; the estimated cost of carrying this Resolution cannot be assessed at this time because we have no idea how strongly this fight will be carried through the Legislature.

Recommendations, Reference Committee No. 3

Reference Committee No. 3 reviewed Resolution O, Physician Members on Local Boards of Health in Kentucky, introduced by the Pennyrile Medical Society, and recommends it be accepted.

Mr. Speaker, I move the adoption and implementation of this section of the report.

(The motion was seconded and carried.)

Mr. Speaker, I move the adoption of the Report of Reference Committee No. 3 as a whole as amended.

(The motion was seconded and carried.)

Mr. Speaker, I wish to thank the members of this Reference Committee, Doctors Thomas Marshall, Grady Stumbo, Raymond Timmerman and John Trevey, and Mrs. Doris Crume for her assistance in preparing this report.

REFERENCE COMMITTEE NO. 3

James A. Baumgarten, M.D., Owensboro, Chairman
Thomas M. Marshall, M.D., Louisville
W. Grady Stumbo, M.D., Prestonsburg
Raymond J. Timmerman, M.D., Ft. Thomas
John E. Trevey, M.D., Lexington

At this time, Donald C. Barton, M.D. took the podium as Chairman of the KEMPAC Board of Directors to present his annual report which follows:

Mr. Speaker, fellow delegates, and guests,

As Chairman of the KEMPAC Board of Directors, I thank you for giving me this opportunity to report on KEMPAC activities this past year.

Last year KEMPAC contributed in excess of \$12,500 through physician candidate support committees in support of candidates for the U.S. Congress. Seventy-five percent of our candidates were winners.

This year KEMPAC is working with candidate support committees in support of candidates for the Kentucky General Assembly. Six thousand dollars were spent in the Primary, and we will consider allocations at our Board meeting tomorrow morning.

The PAC must comply with regulations of the Federal Election Commission and report all contributions to this Commission. The American Political Action Committee (AMPAC) keeps us informed as to changes in these regulations. Since this is the year for support of candidates for the Kentucky General Assembly, we must report to the Kentucky Registry of Election Finance. Be assured that all of your KEMPAC dues are spent wisely and in accordance with the law.

At the request of the membership, the dues year has been changed back to a calendar year basis. The family membership—regardless of marital status—is \$50. Sustaining membership remains \$100, and associate membership is \$20. All of these membership categories include membership in AMPAC.

In 1976, as in past years, the KMA House of Delegates reaffirmed its belief in the objectives of KEMPAC and AMPAC and recommended 100% participation by doctors and their spouses. It further recommended a vote of endorsement and encouragement of the KEMPAC organization to continue its worthwhile political efforts on behalf of our free enterprise system and the freedom of the art and science of medicine.

I request that you reaffirm this endorsement and approve KEMPAC billing with the KMA dues billing. I wish to admonish you, my colleagues, who are not members of KEMPAC. This is your organization, and you should be members. I want to thank you that are members, especially you sustaining members.

On behalf of the KEMPAC Board, I want to thank the KMA Board of Trustees, you Delegates, the Auxiliary to KMA, and staff for your help and support.

Following Doctor Barton's presentation, a motion was made, seconded, and carried to accept the KEMPAC Report.

The members of the House then recessed for a short break, following which Doctor Cooper turned the chair over to the Vice-Speaker.

REFERENCE COMMITTEE NO. 4

Glenn W. Bryant, M.D., Louisville
Chairman

Reference Committee No. 4 considered the following reports and resolutions:

12. Report of the Board of Directors, Blue Cross and Blue Shield of Kentucky

20. Report of the Advisory Committee to Blue Cross and Blue Shield

24. Report of the Claims and Utilization Review Committee

31. Report of the Committee on Community and Rural Health

32. Report of the Committee on School Health, Physical Education, and Medical Aspects of Sports

34. Report of the Committee on Health Care Costs

39. Report of the Advisory Committee to KPRO

1. Report of the President; the entire section numbered Topic VII—Health Care Costs, beginning on Page 1.6 and ending on Page 1.7, *only*

Resolution J—Health Insurance Information (Campbell-Kenton Medical Society)

Resolution K—Blue Shield Usual, Customary and Reasonable Policies (Campbell-Kenton Medical Society)

Report of the Board of Directors, Blue Cross and Blue Shield of Kentucky

We are pleased to report on a year of continued growth and positive accomplishments for Blue Cross and Blue Shield of Kentucky. During 1976 both the Blue Cross and Blue Shield Boards recommended merging the two corporations and this was accomplished on January 1, 1977, to become Blue Cross and Blue Shield of Kentucky, Inc. The efficiencies and economies resulting from merger will put us in a better position to be of service to our members and providers.

During 1976, 1,339 new groups voluntarily enrolled employees and eligible dependents in Blue Cross and Blue Shield of Kentucky, making a total of 14,212 member employee groups. As of June 30, 1977, 1,506,064 Kentuckians have coverage under Blue Cross and Blue Shield.

Membership growth was accompanied by a corresponding rise in benefit payments. A total of \$374,627,636 was paid by the Blue Cross and Blue Shield of Kentucky for provider and professional services rendered in 1976. This includes all Blue Cross and Blue Shield benefits and government contracts administered. The corporation is financially sound with \$20.28 reserve per member which represents 2.77 months of average benefit and operating costs.

Today a major health care concern is "catastrophic" health care coverage. We are continuing to emphasize the importance of our \$250,000 Major Medical Program. This coverage was offered to direct-pay and Farm Bureau members for the first time during 1976 with great success.

The majority of Blue Cross and Blue Shield of Kentucky members now have some form of catastrophic health coverage. As of June 30, 1977, 1,057,461 members were enrolled in catastrophic health coverage either through our Major Medical Program or the Extended Benefits Endorsement.

Although the rate of inflation has decreased, health care costs continue to rise and is a major national concern. Blue Cross and Blue Shield of Kentucky is actively involved in a formal 17-point program directed at the cost of care. Major purchasers of health care benefits are keenly aware of the increasing costs and are looking to their carriers for active programs. The automobile industry now mandates their carriers be involved in certain programs directed at slowing down the cost of health care. We are working with the medical profession in several programs involving health care costs. Members of our staff have worked with the Kentucky Medical Association and the Jefferson County Medical Society on committees studying health care costs.

The pattern of hospital utilization has decreased slight-

ly in Kentucky. This is reflected in both the number of admissions per 1,000 Blue Cross and Blue Shield members and their length of stay. The Governor through an Executive Order has created the Kentucky Insurance Regulatory Board to which all rate adjustments must be presented. To reflect the decrease in utilization, we applied to and the Regulatory Board approved a decrease in the utilization factor in our rating formula for Blue Cross and Blue Shield groups.

Coordination of benefits has been recognized by the Kentucky Department of Insurance for its potential in helping eliminate duplication and hold down costs in the health care industry. In December 1976 with the authority of the Commissioner of Insurance, COB became a part of all groups health coverage contracts.

There is a nationwide effort to promote good health habits and effective self care. The theme of health awareness is being used in our advertising program, both national and local. Proper eating habits, exercise and a healthy lifestyle are encouraged as well as proper utilization of health care services. We are continuing to encourage people to seek alternatives to inpatient care where appropriate. With this in mind, we are offering outpatient diagnostic coverage to all groups as well as direct-pay subscribers.

New benefit levels are also being developed. As a result of recent contract negotiations, the auto industry is being enrolled in hearing and/or vision care benefit programs effective October 1977. We will be administering hearing care for Ford and vision care for Chrysler. We are considering the development of a new catastrophic supplemental program as an option for the "over 65" population.

As always, the staff of Provider and Professional Relations has been busy contacting those involved in the health care industry throughout the state. During the first six months of 1977 alone, they made 4,512 contacts with physician's offices, 1,315 hospital contacts, and 283 nursing home visits. Continued communications with physicians, hospitals, and all providers of health care is vital to the proper operation of the Plan.

The future of Blue Cross and Blue Shield of Kentucky is very promising. The voluntary pre-payment system is strong, vital and continues to grow. As Chairman of the Board and speaking for the Board, we wish to express our thanks to those dedicated people both in and out of the medical profession who make it possible.

The coming years undoubtedly hold many opportunities and many challenges; working as a team, I am sure that we can take advantage of the opportunities and overcome the challenges.

Dale H. Fisher, Chairman

Recommendations, Reference Committee No. 4

The Report of the Board of Directors, Blue Cross and Blue Shield of Kentucky, was reviewed by the Reference Committee. The report contains much factual information concerning the activities of Blue Cross and Blue Shield in the past year showing growth and introduction of new programs. We commend the Chairman, Dale H. Fisher, for his excellent and informative report. The Reference Committee recommends the acceptance of the Report of the Board of Directors, Blue Cross and Blue Shield of Kentucky.

Mr. Speaker, I move the adoption of this section of the report.

(The motion was seconded and carried.)

Report of the Advisory Committee to Blue Cross and Blue Shield

The KMA Advisory Committee to Blue Cross and Blue Shield met at the Blue Cross and Blue Shield of Kentucky Service Center on May 19, 1977.

The first order of business was to review and note that the purpose of the Committee is to "monitor the operation of Kentucky Blue Cross and Blue Shield with the objective of striving to furnish for the public the most advantageous coverage possible for the premium dues paid, avoiding abuses of Blue Cross and Blue Shield to include studying and correcting trends before they develop into abuses and continuing to keep Kentucky physicians informed, interested and with a voice in the operation of Blue Cross and Blue Shield."

In addition to Mr. Tom Stroud, Vice President; Mr. Alan Leichhardt, Director of Provider and Professional Relations; and Mr. Fred Compton, Assistant Director of Provider and Professional Relations, we were pleased to have two members of the Medical Services Division of Blue Cross and Blue Shield of Kentucky, B. Frank Radmacher, M.D. and Parnell Rollings, M.D., with us.

Enrollment

Staff reported the development of a Small Group enrollment package for employers with two to four employees. Marketing will begin in July of 1977.

As was reported last year, Schedule E Blue Shield, an improved indemnity schedule, was developed and marketed to both group and non-group subscribers.

Delta Dental again grew in enrollment and further enrollment increases during 1977 are anticipated.

Provider and Professional Relations

As a part of the on-going Professional Relations program, staff made over 11,500 contacts with physicians' offices during 1976.

A new Blue Shield Manual was completed and distributed to physicians' offices during May and June of 1976. This manual is designed to provide assistance to physicians' offices in identifying benefit levels and in filing claims.

It was noted that administratively it costs as much to reject a Blue Shield claim as it does to pay one. It was felt there was need to identify services that had the highest volume of rejections and implement a concentrated, educational effort with physicians' offices as to correct filing procedures. In 1976, the Provider and Professional Relations Division contacted many physicians' offices in order to reduce the number of claims filed for non-covered services. This project has worked very well and resulted in a decrease in the number of claims returned and rejected.

Claims

The volume of claims processed by Kentucky Blue Cross and Blue Shield in 1976 rose in direct proportion to increased benefits. 472,234 basic Blue Cross claims were processed representing a 9% increase over 1975; while 906,035 basic Blue Shield claims were processed

representing an increase of over 12.1%. Including all lines of business, the Claims Division processed approximately 1,982,168 claims during 1976. In 1976 the Usual, Customary and Reasonable Program paid over 439,000 services amounting to over \$23,500,000. The total dollar amount paid to physicians in Kentucky in 1976 exceeded \$50,000,000.

Over 9,300 claims were processed in accordance with the Coordination of Benefits provision amounting to a savings in claims payments of \$3,059,840. Savings such as this could have a favorable effect on the dues for Blue Cross and Blue Shield subscribers.

Report of the Medical Services Division

The Medical Services Division reviews and interprets the utilization review studies and medical audits conducted by the Plan.

The two Plan physicians in the Division of Medical Services continued to be quite busy in the year that has elapsed since the last meeting of the Committee.

Most of their time was spent in the medical review and adjudication of Blue Cross and Blue Shield claims. Although they review less than two percent of the Blue Cross claims and an even smaller percentage of Blue Shield claims, a considerable amount of time is required when the volume of claims received by the Plan each day is considered.

It was reported that plans were being made to establish a Medical Review Committee (a committee of consultants) to assist Blue Cross and Blue Shield of Kentucky in adjudicating claims relating to the necessity of admission and length of stay. The purpose of this committee of consultants is not to circumvent the KMA peer review mechanism but rather, to provide additional professional review that will assist the Plan physicians in adjudicating claims. Blue Cross and Blue Shield will continue to utilize the various trustee districts and local hospital utilization review committees, as they have in the past, on appealed claims. This review committee **would not review** Blue Shield claims involving fees. The Advisory Committee recommended that Blue Cross and Blue Shield proceed with this committee and report back at the 1978 Advisory Committee meeting.

A discussion was held concerning the trend by some physicians to bill separately for interpreting tests in addition to the routine professional fee for the testing itself. In the past, the charges for the explanation of the implications of the test to the attending physician have been a part of the professional charge of the physician performing the test. When identified, the Medical Services staff is denying this charge since it is not within the realm of Blue Cross and Blue Shield contracts to make payment for these services. This Committee concurs with the Medical Services Division that the charges for interpretation fees should be denied.

Usual, Customary and Reasonable

Over 405,000 Kentuckians are now covered by Usual, Customary and Reasonable contracts and 2,967 physicians have signed agreements to participate representing 80% of all practicing Kentucky physicians.

In the past this Committee heard discussions regarding some physicians' concern over acceptance of assignments for nonparticipating physicians under the UCR

Program. The KMA House of Delegates in 1969 recommended that Blue Shield of Kentucky pay directly to participating physicians and to reimburse their members for services rendered by nonparticipating physicians. Staff reported that they originally honored assignments in order to get the UCR Program started efficiently when the Program began in 1970. Staff reported that assignment of benefits by nonparticipating physicians was no longer accepted after January 1, 1977. Reaction from the physician community has been mostly favorable.

Staff reported some incidences of participating physicians billing the patient the balance due for services covered under UCR certificates. Professional Relations representatives are personally contacting the physician and, in most cases, are receiving complete cooperation.

In 1975, your Committee recommended endorsement of individual physician fee profile system. The 1975 KMA House of Delegates endorsed that report. Individual physician profiles allow Blue Shield to more directly recognize the physician's usual charges in the program's administration. Implementation of these profiles enables physicians to know in advance the payment that can be expected from Blue Shield of Kentucky for covered services rendered to members with UCR benefits. This Committee is pleased to report that the Blue Shield staff has initiated contacts with all participating physicians throughout the state to discuss the doctor's individual fee profile.

Health Care Costs

At the encouragement of the House of Delegates of the Kentucky Medical Association, Blue Cross and Blue Shield of Kentucky developed a method of advising physicians of the costs of services they order for Blue Cross patients.

Parameters were developed which compared physicians according to specialty and location. During 1976, staff personally contacted over 500 physicians to discuss how they compared to their peers in the areas of length of stay, lab, x-ray, and medication. As a result of these visits, many physicians requested special studies to help determine why their hospital practices differed from their peers. Following contact by Professional Relations representatives, many physicians who once exceeded their peers found that their practice patterns changed and they no longer appear as exceptions. The overall response from physicians has been very positive.

In February of 1977, all physicians who admitted five or more Blue Cross patients during 1976 were mailed a summary advising them of the costs of services they ordered for their Blue Cross of Kentucky patients.

An item of considerable concern to the Blue Cross and Blue Shield staff involves the use of inhalation therapy at several hospitals in Kentucky.

Staff identified approximately 20 hospitals whose utilization of inhalation therapy services rose dramatically following the execution of a contract with one of six firms presently marketing these services in our state. Contacts will be made with hospital administration, the private firms themselves, and, where necessary, hospital medical staffs in order to discuss the utilization problem.

We are pleased to report that the Blue Cross and Blue

Shield staff is implementing three pilot projects in order to attempt to contain health care costs.

The first project involves the use of pre-admission testing at selected hospitals to determine if the length of stay for elective surgery can be reduced if tests are performed prior to admission. This new approach to pre-admission testing is unlike previous attempts in that the physician will not be asked to make any changes in his admitting procedures. All administrative activities will be handled by a person located at each hospital. This experiment is scheduled to begin July 1, 1977 and continue until June 30, 1978.

The next experiment involves hemophilia patients taking home drugs in order to reduce the incidence of admission. This experiment will run for two years at two hospitals.

The other test program will involve the establishment of concurrent review activities for Blue Cross patients in at least two pilot hospitals.

Another item of interest to this Committee involves a number of hospital-based physicians who are no longer combining their professional bill with the hospital's bill. Staff reports that at the present time several radiologists have split their billing for services from the hospital's and that it is felt more will follow.

A utilization review program involving Blue Shield claims will be implemented during 1977. These activities will identify patterns of utilization involving surgical, medical, lab, and x-ray services. Several reports will be generated and the Professional Relations staff will discuss these reports with physicians using an educational approach.

Staff reported that physicians' offices will be invited to participate in an experimental program to include the procedure codes on all Blue Shield claim forms. The purpose of this experiment is to evaluate the effectiveness of physicians' offices assigning codes and thereby eliminating codes being assigned by Blue Cross and Blue Shield employees. Staff hopes that this experiment will assist them in reducing claims processing time as well as improving the accuracy of code assignment.

National Medical Necessity Program

Blue Cross and Blue Shield staff reported that the Blue Shield Association, in cooperation with the American College of Radiology, the American College of Surgeons, and the American College of Family Physicians, has implemented a medical necessity program in order to reduce or eliminate certain surgical procedures and diagnostic tools that are considered redundant, inappropriate or outdated by more current techniques. This Committee reviewed the list and concurred with the recommendations of the above associations. Staff stated that in certain situations, and upon justification by the attending physician, these services may be paid.

Your Advisory Committee to Blue Cross and Blue Shield endorses the efforts of Blue Cross and Blue Shield with regard to health costs and urges that they continue to work toward bringing a greater awareness to the effects of those costs on the consumer and provider.

This Committee, in its role of maintaining a close working relationship with Blue Cross and Blue Shield,

hopes to continue to reflect the policies of this Association and to provide assistance in the upgrading of Blue Cross and Blue Shield coverage for our citizens.

Esten S. Kimbel, M.D., Chairman

Recommendations, Reference Committee No. 4

The Report of the Advisory Committee to Blue Cross and Blue Shield has been reviewed by Reference Committee No. 4. This is a lengthy and informative report and the Reference Committee recommends acceptance of the Report of the Advisory Committee to Blue Cross and Blue Shield.

Mr. Speaker, I move the adoption of this section of the report.

(The motion was seconded and carried.)

Report of the Claims and Utilization Review Committee

The Claims and Utilization Review Committee met approximately on a quarterly basis. Although the meetings were few in number, the agendas were quite long and consisted for the most part of utilization cases. Each meeting required that the Committee review anywhere from 10 to 20 claims and, in addition to the utilization and some fee cases, there were a number of precedent matters that required the Committee's attention.

It would not be appropriate to comment on actions taken on specific cases, but this year the Committee took the following types of actions. (1) Recommendations were made to concur with fees charged and necessity and length of hospitalization. (2) Recommendations for reduction of fees charged were made. (3) Recommendations were made for disallowance of fees charged. (4) Recommendations were made for reduction of hospital stays. (5) Recommendations for disallowance of hospital stays were made. (6) Comments were made on specific clinical practices that should be modified in line with current knowledge. (7) Recommendations were made on records keeping. (8) Recommendations were made on changing practice patterns. (9) Recommendations for probation and suspension from participation in health insurance payment plans were made. (10) Referral of individuals to the Judicial Council, the Board of Medical Licensure, and the Committee on Physicians' Health was made.

Some new procedures were instituted this year with the concurrence of the Board of Trustees. The first was that the Committee reports back to district peer review committees any time a local decision is overturned on appeal. This was directed by the House of Delegates. After a case has been with the district committee longer than 60 days, if the carrier contacts the KMA office, it can be allowed to pay its current allowable fee in cases of fee disputes to the attending physician. Review can be reinstituted, then, at the wish of the attending physician. A similar measure applies to utilization cases, except that any UR case not decided within 60 days can be automatically appealed to the state Committee if the carrier so requests. A test procedure was approved by the Board of Trustees where district committees may meet by conference call if they have only a few cases to be reviewed, and if some provision is made for the attending physician to join in the call.

This was instituted to help local committees meet the 60 day deadline when there are not a sufficient number of cases to warrant conducting a meeting, and when members would have to travel great distances. The conference call system has not been used a great deal, but it appears that where calls have been used, they have been reasonably effective.

The Committee was pleased to note increased use of the system this year by both the Medicaid and Medicare Programs. Both Programs have a variety of internal "screens" which, for their purposes, neutralize the need for peer review. Their primary use of the system has been in situations where practice patterns were questionable, and where new procedures or new equipment is used.

Now that the Committee has been appointed on a rotating basis, some members' terms automatically expire this year. The two members who retired this year were both family practitioners, William Becknell, M.D., Manchester, and Lowell Martin, M.D., Martin, and their dedication and contributions to the Committee over a number of years will be sorely missed. We are in the debt of these two gentlemen, who have been a mainstay of KMA's review efforts for quite a while. Named to replace them were Samuel W. Gehring, M.D., Flemingsburg, and James E. Monin, M.D., Jamestown.

The case volume declined over preceding years, partly due to the administrative process of submitting carriers, but also due, we feel, in part to the effectiveness of the review mechanism. We would reiterate that our review activities are a strong tool to help assure quality of care, monitor costs, and protect the patient and the profession. We seek the recommitment of the House of Delegates to this vital function.

A final word is appropriate in commendation to the members of the Committee, who routinely travel long miles to attend and aggressively participate in meetings, which usually last five hours or longer, and I would like to extend a word of thanks to them. Thanks is also due to the Board of Trustees for its support and encouragement throughout the year.

Stuart Graves, Jr., M.D., Chairman

Recommendations, Reference Committee No. 4

The Report of the Claims and Utilization Review Committee was discussed by Reference Committee No. 4. We also had discussion from Cecil L. Grumbles, M.D., a member of the KMA Board of Trustees. We feel this Committee is doing an excellent job in spending many hours in dedication to their duties. The Reference Committee recommends acceptance of the Report of the Claims and Utilization Review Committee.

Mr. Speaker, I move the adoption of this section of the report.

(The motion was seconded and carried.)

Report of the Committee on Community and Rural Health

The Committee on Community and Rural Health met once during the spring of this year. The segment of the Committee's title "Health Care of the Poor" has been deleted. However, the Committee continues to monitor

this area of concern for the Association and act upon any of its problems.

The Committee continues to maintain its liaison with the Division of Alcoholism and Drugs of the Kentucky Bureau for Health Services and with the University of Louisville, Department of Health, Physical Education and Recreation. Plans are being made for the Committee to assist these two groups in planning programs that will attract physician participation at future seminars. Presently, these two groups base the presentation of their annual meetings on a non-clinical nature mainly for the layman.

This year the KMA Annual Meeting program will feature a section on "Alcoholism." Upon the request of this Committee the Scientific Program Committee has put together three presentations that should be very beneficial to those in attendance. The Committee would like to express its appreciation to the Scientific Program Committee for its efforts in this endeavor.

The committee continues its interest and involvement in highway safety that the University of Kentucky School of Engineering and the University of Kentucky College of Medicine have partaken on recreational vehicle accidents. This study has now been concluded, but it will be some time before all of the results are tabulated and recommendations made. Some of the early conclusions already made are: (1) RV Drivers should be schooled and licensed in the proper procedures in handling an RV vehicle. (2) Engineering designs need to be re-done to give RV more stability on the road in adverse weather and overall safer design. (3) Additional supportive seating for passengers be added or redesigned to reduce fatal accidents.

The Committee is also involved in following the latest study (National Crash Severity Study) being conducted by the University of Kentucky Accident Study Team. The study will be trying to determine what steps need to be taken to insure a higher survival rate in automotive crashes.

The trouble with the health manpower shortage in the rural areas of the state has had the Committee concerned for some time and at our meeting this year we were fortunate to have the Assistant Deans of Admissions: James C. Moore, M.D., University of Louisville, and Terrence Leigh, Ph.D., University of Kentucky, to discuss this topic with us. The deans were very enlightening and it was explained to us that Kentucky medical universities have a high proportion of rural to urban admissions. It was pointed out that 56% of the medical students from rural areas return to practice in rural settings.

The qualities of a prospective applicant are reviewed at great length and cover such things as his family background, MCAP test scores, pre-medical school grades and their interviews with the school's Admissions Committee. This year the Kentucky medical schools received approximately 500 applications from Kentucky residents and 1,000 from non-residents for the 225 slots in the freshman classes at U of L and U of K. The medical schools accept 35% of those applying from rural areas and 39% from urban areas.

Some other interesting facts are:

—90% of the openings at medical schools are reserved for Kentucky residents.

—Kentucky ranks seventh in the nation as to the educational quality of applicants that apply each year.

—47% of Kentucky residents applying to Kentucky medical schools will be accepted with one-half of the others re-applying the next year. Eventually 67% to 70% of all residents will be accepted.

The Committee was very concerned about the closure of the state TB hospitals even though the rate of TB cases is starting to show a decline. In 1975 Kentucky was ranked ninth in TB morbidity in the U.S. and in 1976 it was ranked fourteenth. There were 870 cases of TB for a rate of 27 per 100,000 in 1970. In 1975 there were 642 cases for a rate of 19.3 and in 1976, 586 cases for a rate of 17.5. Although the figures show that there is a generalized decrease, we cannot maintain whether it is caused by better drugs and active screening or if it is insufficient case management which would allow cases to go unreported. The fact remains that the TB rate in Kentucky is still excessively high.

The Department of Human Resources, Bureau for Health Services, since closing the state TB hospitals has been decentralizing other segments of the state TB program except in Jefferson and the five counties surrounding it. The Jefferson County program is still maintained by the state with the other counties' TB programs being run by the local county health department. From discussing this problem with various county health officers across the state, the Committee has found that there is still a large problem with the control and case management of TB cases. To assist the physician community that is lacking in the information on current tests, diagnostic aids and the treatments for TB, the Committee decided to obtain this data and disseminate it to the membership.

Legislation was passed in 1976 that made it mandatory for all children entering the first grade to have a TB test. Productive screening programs are one method of controlling TB and the Committee encourages physicians to support this program since it is impossible for the local health departments to cover all segments of the population. Also, periodic testing of TB for all school age children should be encouraged. The problem of TB control has been left up to the private practitioner of Kentucky. We must be aware of the fact that TB is still very much a threat to the citizens of Kentucky.

The reports the Committee received from the Immunization Division of the Department of Human Resources, Bureau for Health Services, show a statewide decrease in the number of children getting immunized. We are aware of the fact that the swine flu program complications have added to this problem but hope and strongly encourage all physicians in Kentucky to make sure their patients have adequate protection.

This year again the Committee is concerned about physician involvement on county boards of health. It was pointed out to the Committee that less than 40% of the county and district boards of health have a quorum when they meet. Although this shortage may not be due to the physician members, the Committee strongly encourages the physician Board members to be in attendance. If they cannot, the Committee feels they should step aside to give another physician an opportunity to serve the needs of the public and medicine.

As Chairman, I had an opportunity in April to attend the National Conference on Rural Health in Seattle, Washington. This three-day Conference offered some 24 different workshops to participate in, each of which was two to three hours in length. Where I was unable to attend all 24 workshops, I did manage to attend quite a few. The two main themes of this program were the continuing encroachment of government upon medicine and the technological advances physicians can expect in the near future to assist them in their medical practice.

Some of the facts relayed to me at this Conference that may be of interest to you are:

- Rural areas have fewer health programs than urban areas.
- There are 3,000 community hospitals that are deficient in the non-urban parts of the country.
- Urban physicians are still getting 60% more benefits than rural physicians.
- Pertaining to Medicaid, 70% of the U.S. population, which needs to be on medical assistance, does not qualify for Medicaid.

Even though there are 15,000 students in the nation's medical schools annually and since 1970, 17% of the physicians have been entering the specialty of family practice, the government still feels that it must push for physician extender programs. One of their reasons being that even though there will be an increase in the primary care physicians within the next 10 years, it will not alleviate the problems in all areas of the country.

The Committee appreciates the assistance they have received from the representatives of the various groups and medical schools whose aid in these endeavors has been extremely helpful to the Committee. I personally want to thank the members of the Committee for their participation.

Stephen B. Kelley, M.D., Chairman

Recommendations, Reference Committee No. 4

The Report of the Committee on Community and Rural Health was discussed by Reference Committee No. 4. This is a rather lengthy, but very informative, report. We appreciate the work of the Committee on this. We think that it should be emphasized that the Committee was quite concerned about the closures of the state TB hospitals even though the fact remains that the TB rate in Kentucky is still excessively high. We do feel that sufficient information on current tests, diagnostic aids and treatment for TB should be disseminated throughout the state. The Reference Committee recommends acceptance of the Report of the Committee on Community and Rural Health.

Mr. Speaker, I move the adoption and implementation of this section of the report.

(The motion was seconded and carried.)

Report of the Committee on School Health, Physical Education, and Medical Aspects of Sports

The Committee had one formal meeting which was held at the KMA Headquarters Building where there was discussion of the care of high school athletes and

the need for the Kentucky High School Athletic Association to encourage each school to designate a teacher as an athletic trainer; the reason being that a non-participating trainer would be more apt to identify medical warning signals that an athlete may be projecting as opposed to a coach who has other team responsibilities. Also these teachers would receive special instruction in athletic training and Sports Medicine as a form of continuing education. The Committee had noted that there had been some problems with the identifications of team physicians as they are present at football and basketball games. The Committee advises the team physicians as well as the coaches through the Kentucky High School Athletic Association that they should identify themselves to the officials and the coach when they arrive on the field, and the Committee is looking into a proper method of identification of the team physician in an effort to prevent communication problems of the team physician in the event of an emergency.

The Committee also wrote a letter to the Kentucky High School Athletic Association urging the mandatory requirement of at least three hours of continuing medical education for high school coaches and trainers; the basis for this being the increasing complexity of medical problems in contact sports and the tremendous responsibility placed on trainers and coaches to provide preventive and emergency care for athletes.

Again this year, for the sixth consecutive year, the Committee sponsored a Sports Medicine Seminar held in conjunction with the Kentucky State Boys' High School Basketball Tournament on the mornings of March 17 and 18 at the Executive Inn in Louisville. We received educational grants for this meeting from Ross Laboratories, and Merck, Sharp & Dohme Laboratories, Roche Laboratories, Bristol Laboratories, Squibb and Sons, and Schering Corporation as well as Mead Johnson Laboratories, Wyeth Laboratories, Riker Laboratories, and Smith, Kline and French Laboratories. The registration for the program exceeded 150 which was 50% more than the previous years with approximately 72 physicians attending. Others attending included coaches, trainers, school administrators, and nurses. Featured speakers for the program were Nathan Smith, M.D., University of Washington at Seattle, a noted authority on Sports Nutrition; Tommy Bell, an attorney and former NFL Official, and Fran Curci, Head Football Coach at the University of Kentucky. A copy of this program is enclosed for the review by the trustees.

Those in attendance were very enthusiastic about the program and suggested support and new concepts for next year's program, and the Committee will again consider the value of the program as our overall program of improving the medical situation in regards to high school athletes.

The Committee would like to thank the representatives of the KMA staff, especially Mr. Joe Witherington, who has been so faithful and hardworking. We want to thank the trustees of the KMA as well as the President, for their continued support of our programs and plans and operations.

Ronald E. Waldrige, M.D., Chairman

Recommendations, Reference Committee No. 4

Reference Committee No. 4 reviewed the Report of

the Committee on School Health, Physical Education and Medical Aspects of Sports. In addition to the written report, testimony was heard by the Reference Committee concerning the recommendation that basketball and other minor sports' participants be given routine physical examinations prior to participation in that sport. The Reference Committee recommends acceptance of the Report of the Committee on School Health, Physical Education, and Medical Aspects of Sports.

Mr. Speaker, I move the adoption and implementation of this section of the report.

The motion was seconded from the floor, and the suggestion was made that the word "minor" be deleted from the phrase "basketball and other minor sports' participants" in the Reference Committee recommendation. The motion then carried with this suggestion being adopted by the House.

Report of the Committee on Health Care Costs

The KMA Council on Health Care Costs began as an Ad Hoc Committee, holding its first meeting May 13, 1976. Since that time, numerous meetings have been held which have led to the development of a statewide Council on Health Care Costs. The Council is comprised of representatives of business, industry, state government, third party payors, physicians, hospital administration, the news media, and society at large. At the time this report is being written, one meeting has been held and a second meeting is scheduled for August.

Our initial meeting was extremely productive and there was general agreement that the issue of cost containment is an extremely complex one. Our initial reaction is that there is a role for a group such as this in addressing the issue of health costs and that education of providers, patients, and third parties (to include governmental programs) of their influence on costs is the key to stabilizing them.

The Council is hopeful that it can develop some type of action plan whereby the issue of cost containment can be effectively addressed in Kentucky, and we would certainly appreciate any input from the membership.

Walter I. Hume, Jr., M.D., Chairman

Recommendations, Reference Committee No. 4

The Report of the Committee on Health Care Costs was reviewed by Reference Committee No. 4. The Committee on Health Care Costs recognizes many complexities and the Reference Committee feels that the Committee should continue to work in all areas involved to contain health care costs. The Reference Committee recommends acceptance of the Report of the Committee on Health Care Costs.

Mr. Speaker, I move the adoption of this section of the report.

(The motion was seconded and carried.)

Report of the Advisory Committee to KPRO

Since our last report to the Association, KPRO has begun implementation of PSRO review in Kentucky hospitals. Multiple seminars have been held throughout

the State to familiarize physicians with KPRO's role in the review process. Intensive training seminars have been developed and provided for the non-physician review personnel involved in this process. The Health Care Coordinators in the various hospitals throughout the State will have gone through a grueling eight-day training period prior to assuming their positions as KPRO Coordinators in their respective hospitals.

There are 108 hospitals in Kentucky subject to PSRO review. As of September 1, 44 of these hospitals will be under binding review (meaning that KPRO certification of necessity of hospital admission or length of stay automatically guarantees payment for these services). The remainder of the hospitals in Kentucky are projected to come under binding review by the first of February next year. At present, 35 hospitals have elected to manage their own review process and have been accorded the "delegates" status by KPRO.

As of this writing approximately 10,000 admissions per month are being reviewed and the data collected under KPRO auspices. These data are being processed and stored by the Medical Research Foundation under a sub-contract to KPRO. When all hospitals are under binding review, approximately 20,000 admissions per month will be handled by KPRO.

The Annual Meeting of KPRO will be held in conjunction with the KMA Annual Meeting and will take place immediately following the morning scientific session on Tuesday, September 27, 1977. At that time, six vacancies on the Board of Directors will be filled.

KPRO has been involved and is still involved in the defense of that section of the Malpractice Act (KY Senate Bill 248) which would protect the confidentiality of all peer review activities in the State. Irrespective of the Supreme Court's final action on this important law, all peer review performed under the auspices of KPRO (including committee deliberations, medical audits, and physician profiles) are fully protected from any disclosure, discovery, or subpoena for civil or criminal court action.

W. Neville Caudill, M.D., Chairman

Recommendations, Reference Committee No. 4

The Report of the Advisory Committee to KPRO was reviewed by Reference Committee No. 4. That Chairman, W. Neville Caudill, M.D., was present and announced the annual meeting of the KPRO will be held on September 27, 1977. The Reference Committee was reassured by Doctor Caudill's reiteration of the confidentiality of their data. The Reference Committee recommends acceptance of the Report of the Advisory Committee to KPRO.

Mr. Speaker, I move the adoption of this section of the report.

(The motion was seconded and carried.)

Report of the President

Topic VII—Health Care Costs Only

During the past year, a Health Care Costs Committee has been active in looking into the overall causes of increasing costs of health care, and more specifically the physician's role in it. In the beginning, the Committee was composed of KMA members only, but has

now been enlarged to a Council to involve members of industry, government, insurance, medical schools, agriculture, hospitals, and health planners. An effort is being made through the suggestions of all of these individuals to identify the causes of increased costs, the value of these causes to good medical practice, and what, if anything, needs to be sacrificed to reduce cost without reducing availability and quality of medical care. We must not practice any less "quality medicine"; the question is, "Can we continue to do so and improve at less than the present cost?" I believe physicians have always questioned themselves regarding charges and procedures necessary for diagnosis and treatment. I believe they will continue to do so.

Recommendations, Reference Committee No. 4

Reference Committee No. 4 reviewed the Report of the President; the entire section numbered Topic VII only. The Reference Committee recommends acceptance of this report.

Mr. Speaker, I move the adoption of this section of the report.

(The motion was seconded and carried.)

Resolution J

Campbell-Kenton Medical Society

WHEREAS, responding to the necessities of the insurance industry, Blue Cross and Blue Shield of Kentucky have found it advisable to merge into a single company; and

WHEREAS, membership on the Board of Directors of these companies is no longer preponderantly physicians; and

WHEREAS Blue Shield is no longer truly the "physicians' company"; therefore be it

RESOLVED, that it is appropriate for physicians to discuss the emerging trends in health insurance with their patients so that the patients may know the advantages of private insurance over federal control of health insurance; and be it further

RESOLVED, that it is desirable for physicians to discuss with their patients the relative merits of the health insurance offered by various insurance companies particularly from the point of cost effectiveness, benefits, and claims handling; and be it further

RESOLVED, that the Kentucky Medical Association develop and make available appropriate comparison material of policies from representative insurance companies for the use of physicians in counseling their patients.

Recommendations, Reference Committee No. 4

Reference Committee No. 4 reviewed Resolution J—Health Insurance Information which was introduced by the Campbell-Kenton Medical Society. The Reference Committee recommends that this Resolution not be accepted.

Mr. Speaker, I move the adoption of this section of the report.

(The motion was seconded and carried.)

Resolution K

Campbell-Kenton Medical Society

WHEREAS, in times past Blue Shield of Kentucky inaugurated a program of medical and surgical insurance designated as U.C.R. or "Usual, Customary, and Reasonable" adopting the definition of those terms generally used by the Kentucky Medical Association; and

WHEREAS, continued operation of a U.C.R. plan presumes some review of "Reasonable" fees by a peer group such as Kentucky Medical Association; and

WHEREAS, initial fee information for the U.C.R. program was developed through a Kentucky Medical Association approved member survey; and

WHEREAS, the U.C.R. program uses a system of reimbursement which denies the privilege of assigning payment to patients of "non-participating" physicians; and

WHEREAS, this discriminatory method was deemed necessary by Blue Shield as an initial marketing device; and

WHEREAS, it is appropriate that the peer review organization have some method of evaluating the U.C.R. plans to assure that the payments are truly U.C.R. and not simply Blue Shield determined; therefore be it

RESOLVED, that the Kentucky Medical Association use every method at its disposal to see that Kentucky Blue Shield develops a satisfactory method of fee assignment which would not discriminate against a small segment of their insured; and be it further

RESOLVED, that the Kentucky Medical Association require that Blue Shield provide it sufficient information so that it may obtain an independent actuarial determination of the usual and customary fees and; be it further

RESOLVED, that if the Kentucky Medical Association is unable to obtain the necessary fiscal information, Kentucky Medical Association should take every step at its disposal to urge Blue Shield and the Insurance Commissioner to change the designation of the U.C.R. program to "Blue Shield Designation Fee Program."

Recommendations, Reference Committee No. 4

Reference Committee No. 4 reviewed Resolution K, introduced by the Campbell-Kenton Medical Society, concerning Blue Shield Usual, Customary and Reasonable Policies. The Reference Committee listened to many members' testimony concerning this Resolution. Reference Committee No. 4 recommends that this Resolution not be accepted.

Mr. Speaker, I move the adoption of this section of the report.

The motion was seconded from the floor.

At this point, the Speaker recognized Howard Heringer, M.D., Delegate from Kenton County, who made a motion that the Reference Committee's motion be amended by the House by substituting the acceptance of Resolution K in place of the Reference Committee's recommendation that it not be accepted. The motion was seconded.

Paul H. Klingenberg, M.D., of Kenton County, stated that in keeping with Doctor Heringer's motion, the last

three words on line 18 (page 4) of the Reference Committee report be changed from "not be accepted" to "be accepted."

Several members of the House spoke against the Resolution, and Mr. Thomas Stroud, Vice President of Blue Cross and Blue Shield, was called to the podium to answer questions regarding the Blue Shield UCR Program.

Thomas L. Heavern, M.D., of Campbell County, was then recognized by the Chair who moved that Resolution K be accepted with an amendment in the first "Resolved" section, causing it to read as follows:

"Resolved, that the Kentucky Medical Association use every method at its disposal to see that Kentucky Blue Shield develops a satisfactory method of fee assignment for all Blue Shield services by participating and non-participating physicians which would not discriminate against a small segment of their insured."

The motion was seconded.

Marcus L. Dillon, M.D., Delegate from Fayette County, was recognized who made a motion to amend Doctor Heavern's amendment by deleting entirely the second and third "Resolves" of Resolution K. A hand vote was taken on Doctor Dillon's motion to amend by deletion of the last two Resolves, which carried 101 to 31.

A motion was then heard to accept Doctor Heavern's motion as amended. The motion carried.

Thus, Resolution K, as accepted in its final form by the House, reads as follows:

"WHEREAS, in times past Blue Shield of Kentucky inaugurated a program of medical and surgical insurance designated as U.C.R. or "Usual, Customary, and Reasonable" adopting the definition of those terms generally used by the Kentucky Medical Association, and

WHEREAS, continued operation of a U.C.R. plan presumes some review of "Reasonable" fees by a peer group such as Kentucky Medical Association; and

WHEREAS, initial fee information for the U.C.R. program was developed through a Kentucky Medical Association approved member survey; and

WHEREAS, the U.C.R. program uses a system of reimbursement which denies the privilege of assigning payment to patients of "non-participating" physicians; and

WHEREAS, this discriminatory method was deemed necessary by Blue Shield as an initial marketing device; and

WHEREAS, it is appropriate that the peer review organization have some method of evaluating the U.C.R. plans to assure that the payments are truly U.C.R. and not simply Blue Shield determined; therefore be it

RESOLVED, that the Kentucky Medical Association use every method at its disposal to see that Kentucky Blue Shield develops a satisfactory method of fee assignment for all Blue Shield services by participating and non-participating physicians which would not discriminate against a small segment of their insured."

Mr. Speaker, I move the adoption of the report of Reference Committee No. 4 as a whole, as amended.

(The motion was seconded and carried.)

Mr. Speaker, I would like to express my thanks and appreciation to the members of this Committee, Doctors Allen E. Grimes, Jr., Marshall R. Johnson, Joseph H. Rapier, Jr., and N. H. Talley, and Mrs. Laura Hamm in the preparation of this report.

REFERENCE COMMITTEE NO. 4

Glenn W. Bryant, M.D., Louisville, Chairman
Allen E. Grimes, Jr., M.D., Lexington
Marshall R. Johnson, M.D., Elizabethtown
Joseph H. Rapier, Jr., M.D., Paintsville
N. H. Talley, M.D., Princeton

REFERENCE COMMITTEE NO. 5

*Charles C. Smith, Jr., M.D., Louisville
Chairman*

Reference Committee No. 5 considered the following reports and resolutions:

18. Report of the Committee on Mental Health-Mental Retardation

27. Report of the Committee on Medicare and Other Governmental Medical Programs

28. Report of the Technical Advisory Committee on Physician Services (Title XIX)

29. Report of the Advisory Committee to Selective Service

1. Report of the President; the entire section numbered Topic III—Medicare-Medicaid Reimbursement, on Page 1.4, *only*

5. Report of the Chairman, Board of Trustees; Special Report A—Medicare, *only*

Resolution C—Medicaid Program in Kentucky (Jefferson County Medical Society)

Resolution G—Disclosure of Federal Reimbursements to all Contractors (Fayette County Medical Society)

Resolution H—Medicaid Reimbursement for Nurse Midwives (Leslie County Medical Society)

Report of the Committee on Mental Health-Mental Retardation

The Committee on Mental Health and Mental Retardation, although they did not meet formally this year, continues to monitor all state mental health facilities and programs.

The Committee strongly encourages the state of Kentucky's Department for Human Resources to continue its support of mental health programs. The new funding for emotionally disturbed children of the state will help greatly to alleviate the increasing number of cases of disturbed youth who have trouble coping with their family and society. This step to help Kentucky youth will be beneficial in reducing the number of misunderstood youth that have plagued the judicial system in the past.

As Chairman, I wish to thank the Committee members for their assistance and hope all physicians will try to assist their local mental health programs as much as possible.

Doyle Hagg, M.D., Chairman

Recommendations, Reference Committee No. 5

Reference Committee No. 5 reviewed the Report of the Committee on Mental Health-Mental Retardation, as well as the recommendation of the Board of Trustees to delete the first sentence of the second paragraph of this report, and recommends acceptance of the report

with the change recommended by the Board.

Mr. Speaker, I move the adoption of this section of our report.

(The motion was seconded and carried.)

Report of the Committee on Medicare and Other Governmental Medical Services

Our Committee's involvement over the past two years with the Medicare Part B Program has become an ongoing concern of the House of Delegates.

Because of its priority, all efforts directed toward the issue this Associational year have been undertaken directly by the Board of Trustees, and these activities will be discussed elsewhere in these reports.

Consequently, the Committee had no formal functions this year, but remains ready to act in any capacity at the direction of the House.

Frank M. Gaines, M.D., Chairman

Recommendations, Reference Committee No. 5

The Report of the Committee on Medicare and Other Governmental Medical Programs was reviewed by Reference Committee No. 5 and is recommended for acceptance.

Mr. Speaker, I move the adoption of this section of our report.

(The motion was seconded and carried.)

Report of the Technical Advisory Committee on Physician Services (Title XIX)

The Technical Advisory Committee on Physician Services to the Kentucky Medical Assistance Program had an active year. This TAC, which is appointed by KMA, was represented at each of the four Advisory Council meetings held and had three separate Committee meetings. In addition, a number of issues were settled by telephone and correspondence between the members. In spite of the fact that this TAC is only an advisory group, and the Advisory Council has only limited authority, we feel it is important to continue vigorous representation of the profession to the Medicaid Program through this channel. Although our efforts have been far from completely successful, we have witnessed some affirmative changes.

A number of items came before the Committee, but only those which are of interest to all practitioners will be addressed here.

The early periodic screening program for children under KMAP apparently has not fulfilled planning expectations because it has been difficult to encourage patients to keep appointments, and follow-up with a physician when necessary has not often occurred. It had been suggested that the program be modified to the extent that children who qualify for this program receive screening instead of true physical examinations, and this Committee expressed opposition.

In the area of peer review, it was gratifying to note that KMAP continues to utilize the KMA peer review

system, and this has been helpful both to the Program and to the affected physicians. In this regard, the TAC makes recommendations on actual disposition of cases referred to and adjudicated by peer review, and in each instance, the peer review recommendations have been upheld.

On a related subject, in the course of the TAC's activities, it was reported that a physician's assistant had been practicing unsupervised and bills were being submitted to the Program. This was investigated by the TAC and, subsequently, referred to the Board of Medical Licensure.

The Medicaid Program has shown a trend lately to emphasize and recognize ancillary medical personnel in so-called primary care settings. In this regard, the KMA TAC was asked to help develop a payment mechanism for physician's assistants working in Health Maintenance Organizations. The TAC recommended that PA's not be reimbursed separately, but their services should be recognized in all settings if they were to be recognized in HMO practice. As a result, no payment mechanism was established. Along similar lines, the TAC has recommended on several occasions that Certified Registered Nurse Anesthetists employed by physicians be reimbursed through the employing physician in a manner similar to their reimbursement when employed by a hospital. Medicaid will pay for their services in this circumstance. This was important because there is at least one area of the state where the only anesthesiology service generally available are through a small physician group that employs CRNA's directly, and little or no reimbursement is made to the group for Medicaid patients. The effect is that anesthesiology services for Medicaid patients are severely hampered. Although the full Council strongly supported this recommendation, no Program changes have yet been made.

In an effort to expand Program services without increasing costs, the TAC recommended that the list of laboratory procedures that would be reimbursed by Medicaid in a physician's office be increased for the sake of convenience in treatment, timeliness in treatment, and because these tests can be performed at the same or less cost than if done by a separate clinical laboratory. The list was updated and has been submitted to the Program for action.

In a similar measure, the TAC recommended that the category of intermediate care patients be allowed to be changed to skilled nursing patients without having to leave the nursing facility in emergencies. Currently, rules require that the patient first be admitted to an acute care hospital. It was reported that this is a Medicare requirement, to which the Medicaid Program must conform, which demanded that each patient must have a three-day qualifying stay in an acute facility before being allowed to be placed in the SNF category.

The Committee would like to point out to the membership an important difference between requirements for the Medicaid Drug Formulary and the broader Kentucky Drug Formulary. The Kentucky Drug Formulary allows physicians to have prescription blanks pre-printed with the words "Do Not Substitute" and are merely required to check this block when they do not want prescriptions filled generically. Under the Medicaid Program the physician must write "Do Not Substitute" in his

own hand if he does not wish substitutions. If a physician makes this indication, his prescriptions will be filled as written. Otherwise, they will be filled according to the Medicaid Drug Formulary restrictions.

Every two years a Subcommittee on Program Projections of the Advisory Council is appointed to develop priorities for Medicaid for the proceeding two years. In July our TAC made recommendations to this Subcommittee and included in this report, in addition to the things already mentioned, were the recommendations that physicians be paid the full Medicare allowable fee levels, and that the Medicaid Program not be expanded any further as far as additional services were concerned, until the primary services currently recognized are first adequately funded.

As Chairman, I would like to thank each of the Committee members for their services. Routinely, the Committee meets in Frankfort just before each Advisory Council meeting, which means our starting time is usually 8:00 a.m. Each member either has to come to Frankfort the evening before, or leave early in the morning to arrive on time, and all members were faithful and dedicated. A particular note of thanks is due to the "old hands" of the Committee, Burl Mack, and Bob Longshore, and also to Bob McLeod, who is the physician member on the full Council, and sits on the Drug Formulary. If any member has any problem with the Medicaid Program where the Committee might be of some assistance, we urge your contact.

Fred C. Rainey, M.D., Chairman

Recommendations, Reference Committee No. 5

The Report of the Technical Advisory Committee on Physician Services (Title XIX) was considered by Reference Committee No. 5. The Committee recommends acceptance of this report, and would like to place special emphasis on that portion of the report dealing with reimbursement of the Certified Registered Nurse Anesthetists employed by physicians. We recommend that the Board of Trustees continue their efforts in this regard.

Mr. Speaker, I move the adoption and implementation of this section of our report.

(The motion was seconded and carried.)

Report of the Advisory Committee to Selective Service

The purpose of this quasi-governmental Committee is to maintain as much as possible an appropriate balance and distribution of medical personnel between our civilian population and the Armed Forces.

With the absence of a draft for physicians, dentists, or allied specialists, it was unnecessary for the Committee to meet during this Associational year.

The Committee members and Colonel Taylor Davidson and his staff with the State Selective Service office have been most helpful and cooperative.

Russell H. Davis, M.D., Chairman

Recommendations, Reference Committee No. 5

Reference Committee No. 5 reviewed the Report of the Advisory Committee to Selective Service and recommends the report be accepted. The Committee further recommends that this Committee not be asked to render

future reports, and no members be named to serve on this Committee, unless Selective Service is reinstituted.

Mr. Speaker, I move the adoption and implementation of this section of our report.

The motion was seconded from the floor and carried, with a notation by Doctor Parks that the Advisory Committee to Selective Service is a permanent committee appointed by the government, and thus cannot be abolished by KMA.

Report of the President

Topic III—Medicare-Medicaid Reimbursement Only

I wish there was an easy answer to this perennial problem. The officers of the Association have spent more time this past year on this topic than perhaps any other. We have had numerous contacts and pieces of information from the Metropolitan Insurance Company. We have had a special session of the House of Delegates, and we have been to Washington to talk with our Legislators and Representatives of the Department of Health, Education, and Welfare. We have discussed the problem with officers of other state organizations and at the AMA Convention in San Francisco in June. No satisfactory solution has yet been found and no clear-cut direction is in sight. We have talked with the Governor of our state about low reimbursement levels in the Medicaid Program, and he has promised to have a good look at the budget, but can offer no definite answer for improvement at the present time. Continued work needs to be done in these areas, and I am sure they will be a concern of many future presidents. Good medical care of all Medicare and Medicaid recipients should continue to be our practice regardless of the source of payment or amount of payment.

Recommendations, Reference Committee No. 5

Reference Committee No. 5 reviewed the Report of the President; the entire section numbered Topic III—Medicare-Medicaid Reimbursement, on Page 1.4, *only*, and recommends it be accepted.

Mr. Speaker, I move the adoption of this section of our report.

(The motion was seconded and carried.)

Report of the Chairman, Board of Trustees

Special Report A—Only

This Association's concern with the Medicare Part B Program has been ongoing for some time and has been intensified since the last regular meeting of the House of Delegates in September of 1976. Because of this concern, it seemed indicated to develop this special report for the information of the membership.

The KMA Committee on Medicare and Other Governmental Medical Programs recommended to the House of Delegates in September, 1976, that the Medicare intermediary be urged to reimburse physicians on the basis of statewide fee data.

After discussion in reference committees and on the House floor, the House voted: ". . . RESOLVED, that the KMA House of Delegates direct the KMA Board of

Trustees to ask the Medicare intermediary in the Commonwealth to seek a single state classification for physician reimbursement."

Following the House session, this information was transmitted to Metropolitan Life Insurance Company, the intermediary for Medicare, in October. Additional information relating to reimbursement to physicians was submitted by the carrier, and upon interpreting this material, the Board felt it appropriate to convene a special session of the House of Delegates in February to further analyze and discuss the implications of the single area classification. At that session, the House established the current policy of the Association with regard to Medicare, by means of the following resolution:

"RESOLVED, KMA and this House of Delegates reaffirm our long-standing position that reimbursement be based on current UCR fees upgraded annually on a UCR basis. Further, be it

"RESOLVED, disputed fees will be subject to peer review with both parties mandated to abide by the decision with appropriate appeals open to both parties, and be it further

"RESOLVED, this House of Delegates emphatically supports the concept of no designated area, and be it further

"RESOLVED, the Association notify the carrier this is the unified position of the Association and request implementation by July, 1977, and be it further

"RESOLVED, that should the carrier fail to implement the above resolution, the KMA request members of Congress to begin an open investigation of the carrier on behalf of the elderly of the Commonwealth of Kentucky and, lastly, be it

"RESOLVED, if the carrier will not support our UCR concept, then let us, unified, work to replace the carrier and, as a last resort, let us individually take such further steps as we may feel to be appropriate and necessary."

Following the special session, the Executive Committee and Board of Trustees spent a great deal of time in developing appropriate implementing actions for this resolution and the policy it established. The major steps to be taken as transmitted to the membership by letter in April, 1977, were to ask the intermediary to help establish an equitable reimbursement mechanism that could be used for discussions with the Department of Health, Education and Welfare; to draft a resolution to submit to the AMA House of Delegates in June to hopefully bring national awareness of Kentucky's problems and support from the national organization; and contacts with Kentucky Congressman Tim Lee Carter, M.D., to meet with appropriate HEW officials to review the operation of Medicare in the State, and the inequities experienced by physicians.

The Metropolitan Life Insurance Company did furnish further fee data, which was analyzed and seemed to emphasize the concerns voiced during the special House session.

The resolution approved by the Board of Trustees to be submitted to the AMA House of Delegates reads as follows:

WHEREAS, Medicare patients are subject to varying financial benefits from the Program despite equal tax

contributions to it across the country, and

"WHEREAS, regulatory provisions of the Medicare Program have created arbitrary and obsolete reimbursement levels to physicians, and

"WHEREAS, the Program has evolved to a point where it causes hardship for the patients it was created to help and discriminates against those physicians who support it most, now therefore be it

"RESOLVED, that the American Medical Association seek to determine by all appropriate means, to include Congressional investigation of all involved federal agencies, if the Medicare Program is being administered consistent with original Congressional intent and on an equal basis to all beneficiaries, and be it further

"RESOLVED, that the AMA develop a program to advise the membership on individual responses to their burdened Medicare patients and individual reactions to Program inequities."

The AMA House of Delegates considered the Kentucky resolution at its meeting in June, together with two other related resolutions in Report D of the Council on Medical Services. A copy of that report is attached. These matters are currently under study by the Council, and KMA has had an opportunity to have additional input in the Council's deliberations beyond content of the KMA resolution.

In May officers of the Association met with each of Kentucky's U. S. Congressmen during the Washington Dinner activities and specifically discussed the Medicare situation. A booklet was prepared that contained reports and related information on KMA's past activities with Medicare and a copy was left with each Legislator for his information. During the Washington trip a special meeting was held in the office of Doctor Carter, which he had arranged with representatives of the Provider and Medical Services Branch of the Bureau of Health Insurance.

During this meeting the same information furnished to the Congressmen was elaborated on for the benefit of the HEW representatives. KMA's concerns, opinions and views on the inequities of the Program were imparted, along with similar concerns of Doctor Carter. In that meeting the HEW representatives indicated that they were undertaking a complete survey of the reimbursement system and charging patterns in our State, and would complete the evaluation by June 1.

The survey was conducted, and the results were summarized in a letter received in the KMA Office on August 4, from the Director of the Provider and Medical Services Branch. This letter stated, in part, that these results were "sufficient indication that significant variations in charging patterns exist (in Kentucky) to preclude a change" of existing charge or socioeconomic areas. The letter further stated that "... approval of a single statewide locality in Kentucky" could not be given in the foreseeable future based on the "significant variations in charging patterns."

The implementing actions developed as a result of the special session have essentially been carried out, as far as possible. The Board will continue to pursue the problem through the AMA and contacts with Kentucky's Congressmen, in addition to continuing to seek other alternatives.

Report of the AMA Council on Medical Service to the 1977 AMA Annual Meeting

At its 1976 Clinical Convention, the Association's House of Delegates referred to the Council on Medical Service for review and report Resolution 48 on "Medicare Fee Profiles" and an associated statement on delineating fees by geographic areas. The Council will review these two matters separately.

Resolution 48: Resolution 48 would have the House resolve:

"That the American Medical Association exert the strongest possible influence on the Bureau of Health Insurance of the Social Security Administration to retain the original concept of the Medicare law and re-establish an equitable payment mechanism for physicians' services."

The Council is wholly in accord with the intent of the resolution, "an equitable payment mechanism for physicians' services." However, as has been pointed out in past reports of the Board of Trustees and the Council on Medical Service, present inequitable reimbursement procedures are embodied in the law itself, not simply in BHI regulations.

While HEW determines the details of the "economic index" which limits the annual percent of increase in "prevailing charge" screens, the index itself is mandated by PL 92-603. In addition, the law requires that the "prevailing charge" will be determined from charge data for the calendar year prior to the July-to-June period during which a claim is submitted. In consequence, the Medicare reimbursement for physicians' claims submitted from July 1, 1977, to June 30, 1978, will be based on individual physician's "customary" (median) charge for the service during calendar year 1976.

Influence exerted on BHI may result in utilization of more realistic factors to determine the "economic index," but such influence will not achieve the removal of discriminatory controls on physician reimbursement which are matters of law.

The Council notes that its own Report H (A-76), adopted by the House of Delegates, recommended that:

"(1) The American Medical Association continue to emphasize usual and customary or reasonable charges as the basis for physician payment," and that

"(2) The American Medical Association redouble its efforts to seek amendment of the Medicare law as it pertains to reimbursement for the physician services and re-cession of the 'Economic Index' regulations, using all available legal means."

To implement these recommendations, the Association has introduced legislation on Medicare and Medicaid amendments which would remove the provision relating to the Economic Index and 75th percentile, and would require the data base on which charges are computed to be updated on a more frequent basis. In addition, the Association has continued to testify before appropriate congressional committees as to the undesirable effects of these discriminatory controls.

The Council believes that its Report H(A-76), which was reaffirmed at the 1976 Clinical Convention, fully satisfies the intent of Resolution 48.

Geographical Areas: Following discussion of Resolu-

tion 48 at the 1976 Clinical Convention, the further statement was referred to the Council:

"Since division of states into geographical areas for payment purposes under Medicare results generally in lower fees for rural physicians, and since lower fees tend to produce a negative incentive to physicians to locate in rural and thinly populated areas, the AMA should make every effort to remove the statutory and regulatory requirements for delineation of fees according to geographical areas."

As this House is aware, the Council has presented two detailed reports in the past two years—Report D (C-75) and Report H (A-76)—on Medicare and Medicaid reimbursement of physicians, with particular emphasis on its impact on physician distribution. The Council has heard much testimony concerning the importance of payment differentials in attracting new physicians. Like the physicians in rural areas, the Council is concerned over the difficulty in persuading new physicians to begin practice there.

However, after hearing this testimony and a careful review of the literature concerning physician distribution which identifies many factors affecting physicians' choices of a practice location, the Council reported that "a strong relationship between income and overall physician distribution has yet to be demonstrated."

Particularly because there is no certainty that eliminating geographic areas from fee determination will solve the rural physician problem, the Council urges thoughtful review of the possible consequences of this change in Association policy.

The Association has continually emphasized—most recently during consideration of Resolution 48 at the 1976 Clinical Convention—that physicians should be reimbursed by Medicare and other third party payors on the basis of their "usual and customary or reasonable charges," and since 1968 "customary" charges have been formally defined by the Association as "that range of usual fees charged by physicians of similar training and experience for the same service **within a given specific limited geographic or socio-economic area.** (bold-face added)

The Council believes that this definition requires the "delineation of fees according to geographical areas" and that state boundaries will seldom meet the criteria of a "specific limited geographic or socio-economic area." To adopt the proposed position would, therefore, demand a reassessment of the profession's basic position on physicians' charges.

In essence, the profession states that each physician has the right to establish his own charges for his services, but that the propriety of those charges may be measured against what his peers, in his own area, charge for the same services.

The Council notes that this proposal would also require a change in Medicare law, which currently requires that reimbursement be no more than the prevailing charge that would cover "75 percent of the customary charges made for similar services in the same locality." Since it is true that payments vary not only between urban and rural areas within some states, but also between states, once localized "prevailing charge" screens are dropped it becomes difficult to justify state-

wide screens, and national screening becomes not only possible but likely.

While the profession's intent in seeking to equalize reimbursement is to pay rural physicians more for their services, there is considerable pressure outside the profession to equalize payment **downward**. If the medical profession itself takes the position that geographical location should not be considered in determining charges, the Council believes that the position of those who seek to reduce physician payments will be strengthened.

The Council believes that a factor in the disparity between urban and rural reimbursement—although certainly not the whole cause—is physician failure to bill Medicare the appropriate charge for the service. Some physicians bill patients and the program only for the amount they know will be allowed—either because it simplifies bookkeeping or because they think they are doing the patient a favor. However, “customary” and “prevailing” charges in the Medicare program are determined from the physicians’ actual identified charges, whether billing is by assignment or directly to the patient, even though delayed by the built-in time-lag and confined within the rate of increase established by the “Economic Index.”

The Council therefore urged physicians, in its Report H (A-76), to “bill their appropriate fees for services, even if payors reduce the amount of payment.” This is, in fact, the only approach consistent with the profession’s position that physicians should establish their own charges, subject to review by their peers. It is also consistent with the profession’s long standing position of encouragement for direct billing under the Medicare program, a commitment that the Council on Medical Service wishes to reiterate.

Over the past several years, the Council on Medical Service has reviewed the physician reimbursement problem many times. Thus far, it is unable to discover an approach which better protects the legitimate interests of both physician and patient than this “usual and customary or reasonable charge” concept.

Recommendations: Based on the above considerations, the Council on Medical Service recommends:

- 1) That Resolution 48 (C-76) be not adopted.
- 2) That current AMA policy supporting delineation of physicians’ fees according to geographic areas be reaffirmed.

Recommendations, Reference Committee No. 5

Reference Committee No. 5 reviewed the Report of the Chairman, Board of Trustees; Special Report A—Medicare, *only*, and held two and a half hours of discussion about the present stance of the KMA in regard to this subject. We recommend that the KMA House of Delegates support the efforts of the Board of Trustees in achieving a Usual, Customary and Reasonable method of Medicare reimbursement. We further recommend that the KMA Board of Trustees seek to educate the membership in regard to Medicare fee profiles, their method of determination, and how they are updated, since there is a widespread lack of understanding on the part of the membership regarding federal regulations. The Committee recommends that Special Report A of the Report of the Chairman, Board of Trus-

tees, be accepted with these recommendations of the Committee.

Mr. Speaker, I move the adoption and implementation of this section of our report.

(The motion was seconded and carried.)

Resolution C

Jefferson County Medical Society

WHEREAS, the Kentucky Medical Assistance Program has notoriously been unfair to physicians in this state since its inception, and

WHEREAS, the state’s physicians have heavily subsidized the Medicaid Program since its inception by accepting extremely low reimbursement for services rendered, and

WHEREAS, the last several Governors, including the present Governor, along with the Secretaries for the Department of Economic Security and the Department of Human Resources, have consistently appeared before the KMA Board of Trustees admitting that the Medicaid Program in Kentucky is under-financed, and, thereby, takes unfair advantage of physicians, and

WHEREAS, we believe that the Bureau for Social Insurance and the Division of Medical Care in the Department of Human Resources, has not properly communicated with or understood the KMA and County Society system of peer review, and

WHEREAS, the Department of Human Resources violated its understanding with KMA concerning peer review when it made a political determination regarding physicians’ work that it determined to be fraudulent; and then directly referred to the Commonwealth Attorney its findings without prior communication to the proper County Society or KMA, now therefore be it

RESOLVED, that the House of Delegates instruct the President of KMA to meet with the Governor and the Secretary for the Department of Human Resources to reach a clear understanding of exactly how the Commonwealth of Kentucky intends to work with practicing physicians in the Medicaid Program, and report back to the KMA membership as soon as possible, and be it further

RESOLVED, that the physicians in the Commonwealth, as represented by this House of Delegates, voice their strong opposition to the state Medicaid Program by the passage of this Resolution declaring that it is time for the Commonwealth of Kentucky to upgrade its physician reimbursement system to a more reasonable level, and agree to work in a more cooperative and less punitive manner with physicians in the future, or we must ask physicians to consider non-participation in the Medicaid Program.

Recommendations, Reference Committee No. 5

Reference Committee No. 5 considered Resolution C—Medicaid Program in Kentucky (Jefferson County Medical Society) and recommends it be amended as follows. Paragraph two (2) shall be rewritten to read, “WHEREAS, the state’s physicians have heavily subsidized the Medicaid Program since its inception by accepting extremely low reimbursement for services rendered, because the Medicaid Program in Kentucky

is under-financed, and, thereby, takes unfair advantage of physicians, and". Paragraph three (3) shall be deleted. In paragraph six (6), the words "to continue" shall follow the phrase "President of KMA"; and in paragraph seven (7), the final phrase shall be deleted, which reads, "or we must ask physicians to consider non-participation in the Medicaid Program." (See following copy of Amended Resolution C)

Amended Resolution C

WHEREAS, the Kentucky Medical Assistance Program has notoriously been unfair to physicians in this state since its inception, and

WHEREAS, the state's physicians have heavily subsidized the Medicaid Program since its inception by accepting extremely low reimbursement for services rendered, because the Medicaid Program in Kentucky is under-financed, and, thereby, takes unfair advantage of physicians, and

WHEREAS, we believe that the Bureau for Social Insurance and the Division of Medical Care in the Department for Human Resources, has not properly communicated with or understood the KMA and County Society system of peer review, and

WHEREAS, the Department for Human Resources violated its understanding with KMA concerning peer review when it made a political determination regarding physicians' work that it determined to be fraudulent; and then directly referred to the Commonwealth Attorney its findings without prior communication to the proper County Society or KMA, now therefore be it

RESOLVED, that the House of Delegates instruct the President of KMA to continue to meet with the Governor and the Secretary for the Department for Human Resources to reach a clear understanding of exactly how the Commonwealth of Kentucky intends to work with practicing physicians in the Medicaid Program, and report back to the KMA membership as soon as possible, and be it further

RESOLVED, that the physicians in the Commonwealth as represented by this House of Delegates, voice their strong opposition to the state Medicaid Program by the passage of this Resolution declaring that it is time for the Commonwealth of Kentucky to upgrade its physician reimbursement system to a more reasonable level, and agree to work in a more cooperative and less punitive manner with physicians in the future.

Reference Committee No. 5 recommends that Resolution C be accepted as amended.

Mr. Speaker, I move the adoption of this section of our report.

The motion was seconded from the floor.

Walter D. Harris, M.D., Delegate from Fayette County, was recognized who moved that the Reference Committee's motion be amended to re-insert the words, "or we must ask physicians to consider non-participation in the Medicaid Program," at the end of the last Resolved. The motion was seconded.

The House asked for the opinion of legal counsel, who stated that the addition of such a phrase could be interpreted as a restraint of trade.

Therefore, the motion to reinsert the phrase, "or we must ask physicians to consider non-participation in the Medicaid Program," was defeated.

On a call for a vote on the original motion that Resolution C as amended by the Reference Committee be adopted, the motion carried.

Resolution G

Fayette County Medical Society

WHEREAS, under the Freedom of Information Act, the Federal Government has singled out physicians by listing those who provided services in excess of \$100,000 under the Medicare program, and

WHEREAS, these lists were published in newspapers across the country; therefore be it

RESOLVED, that the KMA House of Delegates ask the American Medical Association to request that all contractors, consultants, attorneys, and other professionals outside the health field who received \$100,000 or more from any or all federal agencies or departments be listed, and be it further

RESOLVED, that the American Medical Association request that these lists be published, without exception, in every newspaper which listed the medical providers and be given similar or like prominence, and be it further

RESOLVED, that this resolution be sent to Kentucky's Congressional delegation.

Recommendations, Reference Committee No. 5

Reference Committee No. 5 reviewed Resolution G—Disclosure of Federal Reimbursements to all Contractors (Fayette County Medical Society) and recommends that it not be adopted.

Mr. Speaker, I move the adoption of this section of our report.

The motion was seconded from the floor. Ward O. Griffen, M.D., Delegate from Fayette County, was recognized who moved that the recommendation of the Reference Committee not be accepted, and that the following Substitute Resolution be adopted and implemented:

WHEREAS, under the Freedom of Information Act, the Federal Government has singled out physicians by listing those who provide services in excess of \$100,000 under the Medicare Program, and

WHEREAS, these lists were published in newspapers across the country; therefore be it

RESOLVED, that the KMA House of Delegates ask the American Medical Association to request that unless everyone who receives \$100,000 or more for professional services from any or all federal agencies or departments is listed, physicians should not be listed, and be it further

RESOLVED, that this Resolution be sent to Kentucky's Congressional Delegation.

On a call for a vote, the House voted to accept the Substitute Resolution.

Resolution H

Leslie County Medical Society

WHEREAS, State Administrative Regulation 902

KAR 4:010 defines nurse-midwives as registered nurses with additional training in the obstetrical care of maternity patients and neonatal care of infants, and

WHEREAS, only graduates of nurse midwifery schools accredited by the American College of Nurse-Midwives, who have passed the National Nurse-Midwifery Examination, can be certified by the Commonwealth of Kentucky as nurse-midwives, and

WHEREAS, Certified Nurse-Midwives are authorized by this Commonwealth to provide prenatal, delivery, and postpartum care as well as neonatal care, and

WHEREAS, these nurse-midwifery services are to be rendered within the boundaries of her professional competence, within the framework of medically approved protocols, and in collaboration with the physician, therefore be it

RESOLVED, that the Kentucky Medical Association recommend to the Department for Human Resources that reimbursement be made for the professional services rendered by Certified Nurse-Midwives to patients holding Kentucky Medical Assistance Program cards.

Recommendations, Reference Committee No. 6

Reference Committee No. 5 considered Resolution H—Medicaid Reimbursement for Nurse Midwives (Leslie County Medical Society) and recommends its adoption with the following amendments. The final paragraph should be amended to read, "RESOLVED, that the Kentucky Medical Association recommend to the Department for Human Resources that reimbursement be made to a physician and/or a facility for the professional services rendered by Certified Nurse-Midwives under the direction of a physician to patients holding Kentucky Medical Assistance Program cards."

Mr. Speaker, I move the adoption of this section of our report.

The motion was seconded from the floor. Van R. Jenkins, M.D., Delegate from Fayette County, moved that the words, "and/or facility," be deleted from the Reference Committee's recommendation. The motion was seconded.

Doctor Holloway, Chairman of the Board of Trustees, was then recognized who made a motion, per the recommendation of the Board, that the phraseology in line 18 on page 4 of the Reference Committee report be changed to read, "services rendered by Certified Nurse Midwives under the direct supervision and immediate availability of a physician to patients holding Kentucky Medical Assistance Program cards." The motion was seconded.

A Delegate from Jefferson County then made a motion that since adequate background information was not available, this matter be referred to the Board of Trustees for further study. The motion was seconded but was defeated.

A vote on the motion to accept the change suggested by the Board was affirmative, and was followed by a vote on the motion to delete the words, "and/or facility" from the Resolved section of the Resolution. The vote was 101 to 44 in favor of deletion.

The Resolved section of Resolution H, as ultimately adopted by the House, reads as follows:

"Resolved, that the Kentucky Medical Association recommend to the Department for Human Resources

that reimbursement be made to a physician for the professional services rendered by Certified Nurse-Midwives under the direct supervision and immediate availability of a physician to patients holding Kentucky Medical Assistance Program cards."

Mr. Speaker, I move the adoption of the report of Reference Committee No. 5 as a whole as amended.

(The motion was seconded and carried.)

Mr. Speaker, I would like to thank Doctors J. L. Becknell, Danny M. Clark, John E. Downing, and C. Douglas LeNeave, as well as Ms. Sharon Heckel, for their assistance in preparing this report.

REFERENCE COMMITTEE NO. 5

Charles C. Smith, Jr., M.D., Louisville, Chairman

J. L. Becknell, M.D., Manchester

Danny M. Clark, M.D., Somerset

John E. Downing, M.D., Bowling Green

C. Douglas LeNeave, M.D., Mayfield

REFERENCE COMMITTEE NO. 6

*Wally O. Montgomery, M.D., Paducah
Chairman*

Reference Committee No. 6 considered the following reports and resolutions:

10. Report of the Judicial Council

11. Report of the Rural Kentucky Medical Scholarship Fund

22. Report of the Physician-Attorney Liaison Committee

23. Report of the KMA-Kentucky Nurses Association Joint Practice Committee

37. Report of the Committee to Study the Constitution and Bylaws

38. Report of the McDowell House Board of Managers

Resolution L—Privileges of AMA Alternate Delegate (Campbell-Kenton Medical Society)

Resolution M—Provision for AMA Referenda (Campbell-Kenton Medical Society)

Report of the Judicial Council

The medical profession continues to come under close scrutiny by the public and government. This is a healthy trend in one sense because our practices and actions must be subject to evaluation if medicine is to maintain the purity of science and the humanity of art, but our profession has likewise been subject to misdirected attacks that are an unfortunate by-product of sincere question. Subjects of both nature occupied the Council's attention this Associational year.

Patient complaints against individual physicians increased substantially over previous years and, while the majority were insignificant, a recognizable percentage did require vigorous action by the Council. It was interesting to note that many of the insignificant complaints resulted from simple misunderstanding between patient and physician and may well have been avoided. The Council urges individual members to evaluate their

own "patient relations" to try and prevent disgruntled feelings because of simple misunderstandings.

The Council's activities fall into two major categories: developing ethical policy positions and reviewing and making judgments on specific instances of ethical medical practice. Major examples of both that were encountered this year and have application to the entire membership can be described.

In one instance, a clinic requested patient records from a former physician who would not release them because the patient had not paid his bill. The Council ruled that "it is unethical for a physician who formerly treated a patient to refuse, for any reason, to make his records of the patient promptly available, on request, to another physician presently treating the patient".

In another situation, an individual member had contacted the Council and advised that he had been requested to x-ray patients of a local chiropractor. The Council determined that this was unethical in keeping with AMA ethical principles and ruled that "a physician should practice a method of healing founded on a scientific basis and he should not voluntarily associate professionally with anyone who violates this principle."

In a situation that raised a question concerning a physician's ethical practice, local physicians together with physicians at the University of Kentucky Medical Center, investigated the practice of a physician based on apparent morbidity statistics of his patients treated with chemotherapeutic drugs. By the time that sufficient information was gathered to question the physician, it was learned that he had left the state and the information was forwarded on to the state medical association where he was newly located. Soon thereafter, the physician returned to Kentucky and had requested staff privileges at a hospital outside of his previous location. After a lengthy discussion with him, the Council determined that he was not trained or qualified to administer the chemotherapeutic agents and a further review of several case files raised questions of his judgment on surgical procedures. The hospital from which he had requested staff privileges was asked to make further inquiries before granting those privileges and the Council is still in the process of contacting the hospital where this particular physician performed his residency training and has kept the Licensure Board advised.

In another area of the state, several local citizens had contacted the Council and had advised that an older, established physician in the community was responsible for having a newly graduated physician who had located there to leave. Further review indicated to the Council that the same event had occurred with five previous young physicians and each was contacted for further information. Two of the five replied and it appeared that the citizens' complaint was substantiated. The matter was then referred to the Board of Medical Licensure and appropriate disciplinary action ensued.

At this point, the Council feels it is incumbent to point out its relationship with the Board of Medical Licensure. Mutual assistance between our two groups has, the Council feels, enhanced the effectiveness of both. The Council's primary responsibility is with ethical questions, and it is gratifying to be able to work closely with our licensing agency when resolution of ethical

problems extends beyond the authority of the Council.

This year saw increased activity relating to two fairly new functions of the Judicial Council: its relationship to the KMA Committee on Physicians' Health and patient fee complaints. The Council serves as the parent or coordinating body for the Committee on Physicians' Health to the extent that it is in a position to refer matters to that committee and accept referrals from it when the committee has reached the limit of its capabilities with regard to dealing with an impaired physician. Although formal action by the Committee on Physicians' Health has been limited this year, the Council feels that the relationship that has been established, which includes a further tie-in with the Board of Licensure, is a necessary service and fairly effective mechanism for the KMA membership.

As many as 40 to 50 phone calls are received each month by the KMA office from patients complaining about treatment by physicians. A good number of these complaints relate to fees charged and the Judicial Council has assumed overall responsibility for dealing with these complaints, although it now uses the state Claims and Utilization Review Committee, informally, on simple fee disputes. Whenever a written fee complaint is received, the Council refers it to the Claims and Utilization Review Committee which conducts an informal review to determine if the complainant has a justifiable grievance. If so, the Council attempts to communicate and arrive at a conclusion with the attending physician primarily to learn if he is, in fact, an aberrant practitioner. If the fee does not appear to exceed usual and customary ranges, or represent any questionable pattern, the complainant is so advised.

It is obvious that this mechanism can provide only a cursory examination of any actual fee questions, but it does allow the patient some recourse, particularly in those areas of the state that are not able to operate a formal grievance committee.

Probably the majority of the Council's time this year was consumed by routine ethical questions in specific circumstances which are too numerous to mention here. In this respect, however, it is important to point out that the Council's effectiveness is limited to the information it is able to acquire in each situation. For the most part of the state, the Council is forced to rely almost solely on District Trustees for first-hand investigations. It is realized that the Trustees have considerable routine responsibilities, not counting assisting the Council, but the Council urges close cooperation and is hopeful that a closer working relationship can be established with individual Trustees.

As the Chairman, I would like to thank Doctor James Willoughby whom I succeeded this year and the other Council members for their long, sometimes arduous work, and tireless efforts. I'd also like to thank Mr. Carl Wedekind, KMA Legal Counsel, and Mrs. Shirley Roessler, KMA Staff, for all their efforts and support.

J. Campbell Cantrill, M.D., Chairman

Recommendations, Reference Committee No. 6

Reference Committee No. 6 considered the Report of the KMA Judicial Council. It was noted with concern that the Judicial Council had a substantial increase in reviewing complaints this year, both of ethical policy

position and ethical medical practice. The specific examples of the Council's activities this year point to problems that each county society and other KMA members may be able to prevent by prudent early action. Also, the report notes the mutual relationship with the Kentucky State Board of Medical Licensure.

The Reference Committee noted with concern the problem of the Judicial Council in investigating complaints against KMA members. It is our feeling that the Trustee, Alternate Trustee, County Society Grievance Committees, or District Grievance Committees should be most responsive to the inquiries from the Judicial Council. We would like to recommend that each county, or multi-county society, have an active grievance committee known to the KMA Staff, and that this committee could be called upon to investigate complaints at the local level.

We would like to express a sincere thank you to J. Campbell Cantrill, M.D., the Council members, and KMA legal counsel, Mr. Carl L. Wedekind, Jr. for their endeavors this year.

The Committee recommends acceptance of the Report of the KMA Judicial Council.

Mr. Speaker, I move the adoption of this section of the report.

(The motion was seconded and carried.)

Report of the Rural Kentucky Medical Scholarship Fund

The Board of Trustees of the Rural Kentucky Medical Scholarship Fund is pleased to report that at its 31st Annual Meeting a total of 51 new and renewal loans were approved, in addition to three Establish Practice Loans, for a total loan amount of \$200,500. The Fund, in approving these loans, now has a record of having assisted a total of 424 medical students. The Fund, which is one of the nation's pioneer scholarship funds for medical students, boasts of now having 210 physicians in practice in 87 Kentucky counties, 55 students currently in medical school, and 28 recipients in residency training.

This year, the Board approved an increase in the amount of the loans from \$3,500 to \$4,000 for first loan recipients only. All loans bear an interest rate of 2% to maturity, and practice is permitted in 113 of Kentucky's 120 counties. Other action of the Board included designating 30 counties in Kentucky each year as "critical" counties. The Fund will forgive one loan for each year of practice in a critical county. Also, the Fund will approve two student loans each year for those desiring to enter the Kentucky Public Health Service, with practice in the public health field having the same loan forgiveness as the critical county loan.

All notes and loan agreements are processed at the KMA Headquarters Office. Progress reports are secured on students in medical school, and contact is maintained with residents and past recipients in practice. The Louisville Trust Bank, Inc. is the fiscal agent for the Fund.

Loans are available to residents of Kentucky who have been admitted to one of the two medical schools in Kentucky, and who will agree to practice in rural Kentucky one year for each loan received.

The Board of Trustees is especially appreciative of the continued interest and support of Governor Julian M. Carroll, Commissioner for Health Services, William P. McElwain, M.D., and the Kentucky General Assembly.

Gaithel L. Simpson, M.D., Chairman

Recommendations, Reference Committee No. 6

Reference Committee No. 6 next reviewed the Report of the Rural Kentucky Medical Scholarship Fund. The success of this program in Kentucky is noted with gratitude to the members of the Rural Kentucky Medical Scholarship Fund and its Chairman, Doctor Gaithel L. Simpson.

The Committee recommends acceptance of the Report of the Rural Kentucky Medical Scholarship Fund.

Mr. Speaker, I move the adoption of this section of the report.

(The motion was seconded and carried.)

Report of the Physician-Attorney Liaison Committee

The Physician-Attorney Liaison Committee is composed of three physicians appointed by the Kentucky Medical Association and three attorneys appointed by the Kentucky Bar Association with co-chairmen representing both associations. The Committee serves to establish and maintain a greater degree of understanding between the two professions on matters of mutual concern and serves as a referral body for problems arising between members of the two professions. The basis upon which this Committee functions is the Interprofessional Code adopted by both the KMA House of Delegates and the Kentucky Bar Association.

The Committee did not find it necessary to meet during this Associational year since the only complaint received was settled by telephone calls and correspondence.

The Committee once again would like to emphasize that most problems between physicians and attorneys could be avoided by reference to the Interprofessional Code before any formal relations are begun. Copies of the Code can be obtained from the KMA or KBA offices.

Thomas M. Marshall, M.D., Co-Chairman

Recommendations, Reference Committee No. 6

Reference Committee No. 6 next considered the Report of the Physician-Attorney Liaison Committee written by Co-Chairman, Thomas M. Marshall, M.D. It is comforting to note that the Physician-Attorney Liaison Committee found no major disputes to have developed.

The Committee recommends acceptance of the Report of the Physician-Attorney Liaison Committee.

Mr. Speaker, I move the adoption of this section of the report.

(The motion was seconded and carried.)

Report of the KMA-KNA Joint Practice Committee

The KMA-KNA Joint Practice Committee has met numerous times this past year besides hosting the first annual Joint Practice Seminar.

The main goal of the Committee this past year was the presentation of the Seminar on joint practice. The Seminar, which was held in March, was well attended by representatives of the various allied health fields. The registration far exceeded the Committee's expectations and the day-long program was of timely interest to all in attendance. The participants at the Seminar discussed a wide variety of approaches on handling joint practice problems and examined the many benefits such a practice can yield.

The exchange of ideas that accompanied the discussion groups at the Seminar and the ensuing question and answer period that followed that session, has given the Committee a vast amount of material to review and formulate solutions for. The Committee recommends continuation of this Seminar at least once a year or every other year.

We would like to express our appreciation to the National Joint Practice Commission for their support of the Seminar and for attendance by Richard E. Flood, M.D., and Linda Jessup, R.N., who are National Commissioners, and Mr. Gregory Nigosian with the National Joint Practice staff. We are gratified that portions of the Seminar were taped and transcripts will appear in the *NJPC Bulletin*.

The continuing education of physicians and nurses in the joint practice field is one of the top priorities of this Committee. New topics on hospital joint practice settings, joint practice legal problems, and urban/rural joint practice settings are being discussed as possible topics for the next seminar.

The Committee continues its review and study of physicians' assistants and nurse practitioners and is continuing to work with the Kentucky Nurses Association on a specific definition for the duties of a nurse practitioner. The Committee does not support any particular concept of a physician's assistant, but does, however, wish to present all the facts to the physicians of the state in order that they may make their own determination as to the use of such extenders.

As Chairman, I wish to express my appreciation for the work of my Co-Chairperson, Sister Francis Scholl, R.N., the staff of KNA and KMA for setting up the Seminar, and the members of the Committee for their time and support.

Kenneth P. Crawford, M.D., Co-Chairperson

Recommendations, Reference Committee No. 6

Reference Committee No. 6 next considered the Report of the KMA-Kentucky Nurses Association Joint Practice Committee. The success of the Joint Practice Seminar held in March of this year was noted.

Through discussion and comments heard at the Reference Committee, it was felt that the KMA Committee on State Legislative Activities be urged to develop specific definitions and duties of nurse practitioners as well as physicians' assistants and other allied health personnel. It was the feeling of the Reference Committee that we work through legislative channels for certification and not licensing of these allied health groups. Also, we feel that any legislation should specify that these allied health groups work under the direction of a physician and that there not be independent practice of physicians' assistants or nurse practitioners.

We commend Doctor Kenneth P. Crawford as Co-

Chairperson of this Committee.

Reference Committee No. 6 recommends acceptance of the Report of the KMA-Kentucky Nurses Association Joint Practice Committee.

Mr. Speaker, I move the adoption and implementation of this section of the report.

The motion was seconded from the floor. W. Eugene Sloan, M.D. of McCracken County, was recognized who made a motion that the Reference Committee's report be amended by adding the words, "and the KMA-KNA Joint Practice Committee" in the second paragraph of the Reference Committee report as follows, "... it was felt that the KMA Committee on State Legislative Activities and the KMA-KNA Joint Practice Committee be urged to develop specific definitions and duties of nurse practitioners as well as physicians' assistants and other allied health personnel." The amendment was seconded and carried.

On a call for the vote, the original motion was passed as amended.

Sam H. Traughber, M.D., Delegate from Christian County, was recognized who proposed an editorial change that the word "allied" (health personnel) be changed to "similar" each time it appeared in the Reference Committee's recommendations regarding Report No. 23. It was taken by consent to accept this as an editorial change.

Report of the Committee to Study the Constitution and Bylaws

Your Committee to Study the Constitution and Bylaws met this year on June 9 for its annual session to implement Bylaw changes that had been proposed to the Committee, and to generally update the Bylaws.

Our format for presentation will be to first present our recommendations and reasons for submitting any proposed changes. Secondly, we will quote the wording of the present section of the Constitution and Bylaws; and thirdly, present the proposed amendments to the Constitution and Bylaws.

Amendments to the Constitution

Last year the Pennyryle Medical Society introduced Resolution V which was passed by the House calling on KMA to change its Constitution to allow past Presidents, past Vice-Presidents, and Vice-Chairmen of the Board to be ex-officio members of the House of Delegates. Since amendments to the Constitution must lay over one year and be re-voted, the following Constitutional change is again represented for your consideration. The proposal was also sent to each county medical society two months prior to the meeting of this House.

ARTICLE VI

Present Section 2: "Delegates should be members of and elected by component county societies in such manner as may be provided in the Bylaws. Officers of the Association, Delegates, and Alternate Delegates of the American Medical Association and five immediate Past Presidents shall be the ex-officio members of the House of Delegates and entitled to vote."

Proposed Section 2: Delegates should be members of and elected by component county societies in such

manner as may be provided in the Bylaws. Officers of the Association, Delegates and Alternate Delegates of the American Medical Association and five immediate Past Presidents shall be the ex-officio members of the House of Delegates and entitled to vote. *All other Past Presidents and Vice Presidents and Past Chairmen of the Board of Trustees shall be ex-officio members of the House. They shall have the right to speak and debate on the floor of the House but shall not have the right to make a motion, introduce business or an amendment, or vote.*"

Amendments to the Bylaws

For a number of years, members of the dental profession have been eligible for KMA membership as a special member. The committee feels that members of the dental community should be accorded Associate membership privileges. Since members of the dental community are much fewer in number than physicians and since, in many areas, there is no organized dental society resulting in dentists relying on their local medical community for continuing medical education and other professional activities, it would seem to us that this category would be more appropriate. Thus, we are recommending a new sub-paragraph (d) (3) be added to the present Section 2, Chapter I of the Bylaws, and that dentists be removed from paragraph (1) Special Members.

CHAPTER I, Membership

Proposed Section 2, (d) (3): Dentists may be invited to become Associate Members.

Present Section 2, (1): Special Members: Component societies may invite dentists, pharmacists, funeral directors, or other professional persons to become special members. Special members shall have no rights or obligations under these Bylaws, but may be accorded the privilege of attending or participating in Scientific meetings of the society, provided, however, that a registration fee may be required of special members who desire to attend the Annual Meeting of the Association.

Proposed Section 2, (1): Special Members: Component societies may invite pharmacists, funeral directors, or other professional persons to become special members. Special members shall have no rights or obligations under these Bylaws, but may be accorded the privilege of attending or participating in Scientific meetings of the society, provided, however, that a registration fee may be required of special members who desire to attend the Annual Meeting of the Association.

Recommendation

In President Hull's final address to the House of Delegates last year, he recommended that since AMA Alternate Delegates are invited to and do attend most meetings of the Board of Trustees, but since they are not delineated as Board Members by the Association Bylaws, that they be accorded the right to vote in the absence of the primary delegates to the AMA.

CHAPTER VI. Board of Trustees

Present Section 7: In the event of a death, resignation, removal, or disability of a Trustee, between sessions of the House of Delegates, the Alternate Trustee shall succeed to the office of Trustee. In case of disability, the Alternate shall serve until the disability is removed

or the Trustee's term expires, and in the absence of the Trustee, the Alternate Trustee shall vote in his place and stead.

Proposed Section 7: In the event of a death, resignation, removal, or disability of a Trustee, between sessions of the House of Delegates, the Alternate Trustee shall succeed to the office of Trustee. In case of disability, the Alternate shall serve until the disability is removed or the Trustee's term expires, and in the absence of the Trustee, the Alternate Trustee shall vote in his place and stead. *The Alternate Delegate to the AMA shall in like manner fill an unexpired term of an AMA Delegate and in his absence shall vote in his place and stead.*

Robert L. McClendon, M.D., Chairman

Recommendations, Reference Committee No. 6

Reference Committee No. 6 next considered the Report of the Committee to Study the Constitution and Bylaws. The Reference Committee recommends deletion of present Article VI, Section 2 of the Constitution and substitution of the following:

"Section 2: Delegates shall be members of and elected by component county societies in such manner as may be provided in the Bylaws. Officers of the Association, Delegates and Alternate Delegates of the American Medical Association and five immediate Past Presidents shall be the ex-officio members of the House of Delegates and entitled to vote. All other Past Presidents and Vice Presidents and Past Chairmen of the Board of Trustees shall be ex-officio members of the House. They shall have the right to speak and debate on the floor of the House but shall not have the right to make a motion, introduce business or an amendment, or vote."

Mr. Speaker, I move the adoption and implementation of this section of the report.

(The motion was seconded and carried.) It was noted that in accordance with the Bylaws, this proposed change had been sent to the Delegates 30 days in advance of the House session.

The Committee has recommended that dentists may be invited to become Associate Members, which would add to Chapter I, Section 2, (d) (3) of the Bylaws to read as follows: *"Dentists may be invited to become Associate Members."*

Mr. Speaker, I move the adoption and implementation of this section of the report.

(The motion was seconded and carried.)

With the immediate previous favorable vote, the Committee recommends the deletion of dentists from Chapter I, Section 2, (i) of the Bylaws, which would allow Chapter I, Section 2, (i) to read as follows:

"Chapter I, Section 2, (i) Special Members: Component societies may invite pharmacists, funeral directors, or other professional persons to become special members. Special members have no rights or obligations under these Bylaws, but may be accorded the privilege of attending or participating in Scientific meetings of the society, provided, however, that a registration fee may be required of special members who desire to attend the Annual Meeting of the Association."

Mr. Speaker, I move the adoption and implementation

of this section of the report.

(The motion was seconded and carried.)

Resolution L

Campbell-Kenton Medical Society

WHEREAS, the Alternate Delegates to the American Medical Association customarily attend the meetings of the Board of Trustees with the privileges of the floor, but without the privilege of introducing motions and voting; and

WHEREAS, through their dedicated service the Alternate Delegates to the American Medical Association contribute many days each year to the Organization; and

WHEREAS, the Alternate Delegates to the American Medical Association develop maximum familiarity with both state and national medical issues; and

WHEREAS, it is fitting that the Alternate Delegates receive the privileges of full Board membership along with the duties and obligations so that the Association may reap full benefit from their expertise; therefore be it

RESOLVED, that the Bylaws, Chapter 6, Section 1, second literary sentence be amended by the addition of the words, *and Alternate Delegates* to read: "The Board of Trustees shall consist of the duly elected Trustees and the President, the President-Elect, the Vice-President, the immediate Past-President, the Speaker, and Vice-Speaker of the House of Delegates, the Secretary-Treasurer, and the Delegates *and Alternate Delegates* to the American Medical Association."

Recommendations, Reference Committee No. 6

Reference Committee No. 6 next considered, along with the Report of the Committee to Study the Constitution and Bylaws, Resolution L—Privileges of AMA Alternate Delegate, introduced by Campbell-Kenton Medical Society. It was discussed at length the privileges of the AMA Alternate Delegate to attend and be heard at the KMA Board of Trustees meetings.

The consensus of the Reference Committee was that Resolution L not be adopted and that the recommendation of the Constitution and Bylaws Committee be adopted to add the following sentence to Chapter VI, Section 7 of the Bylaws:

"The Alternate Delegate to the AMA shall in like manner fill an unexpired term of an AMA Delegate and in his absence shall vote in his place and stead."

The sentence would then make Chapter VI, Section 7 to read as follows:

"Section 7: In the event of a death, resignation, removal, or disability of a Trustee, between sessions of the House of Delegates, the Alternate Trustee shall succeed to the office of Trustee. In case of disability, the Alternate shall serve until the disability is removed or the Trustees term expires, and in the absence of the Trustee, the Alternate Trustee shall vote in his place and stead. The Alternate Delegate to the AMA shall in like manner fill an unexpired term of an AMA Delegate and in his absence shall vote in his place and stead."

Mr. Speaker, I move the adoption and implementation

of this section of the report.

The motion was seconded from the floor.

Thomas L. Heavern, Jr., M.D., Campbell County, was recognized who made a motion that a substitute amendment be made to the original motion calling for Resolution L to be adopted in place of the report of the Reference Committee.

On a call for the vote, the substitute amendment was adopted.

Reference Committee No. 6 recommends acceptance of the Report of the Committee to Study the Constitution and Bylaws as amended.

(The motion was seconded and carried.)

Mr. Speaker, I move the adoption and implementation of this section of the report as amended.

(The motion was seconded and carried.)

Report of the McDowell House Board of Managers

The Board of Managers of the McDowell House has met in the House each three months of the year to appraise the condition of the House, its financial stability, its position as a historic landmark, and its image for the accomplishments of medicine.

The financial condition at this time is sound. The income from individuals visiting the House approximates \$5,000 per year, while the cost of maintaining the House is approximately \$16,500 per year. Fortunately, in the past year the Kentucky Heritage Commission has given the House an additional \$9,500 for repairs, which has allowed savings in the funds set aside for repairs. This contribution is being used to remove the many coats of old paint on the outside of the building and to remove the deteriorated caulking from around the windows. The new paint and new caulking, along with various lesser repairs, will improve the condition of the House. The Kurfee Paint Company will furnish the paint without charge.

The interest of the members of the Board of Managers is a serious one. The lay members on the Board, particularly those expert in the field of historic restoration, have added greatly to the judgment of the Board. The Auxiliary of the Kentucky Medical Association continues to aid the House and this year is arranging for the refurbishing of three old portraits from funds which the Auxiliary has raised.

The condition of the House and its stability at this time are satisfactory, and it continues as an unusual and important shrine for medicine.

Laman A. Gray, Sr., M.D., Chairman

Recommendations, Reference Committee No. 6

Reference Committee No. 6 next considered the Report of the McDowell House Board of Managers. Doctor Laman A. Gray, Sr., Chairman of the McDowell House, gave a report of the refurbishing efforts and the KMA support of this worthy shrine of medicine. We commend Doctor Gray and his Board of Managers.

Reference Committee No. 6 recommends acceptance of the Report of the McDowell House Board of Managers.

Mr. Speaker, I move the adoption of this section of the report.

(The motion was seconded and carried.)

Resolution M

Campbell-Kenton Medical Society

WHEREAS, in order to provide the maximum "grass roots" input and direction into both county medical societies, state medical associations, and into the American Medical Association so that policy decisions on critical issues involving patients and physicians in this country might be made on the "one-man, one-vote" principle, and

WHEREAS, in order to provide a continuity of involvement of local physicians in the local, state, and national decision-making process, so that they will become better informed and involved, therefore be it

RESOLVED, that the KMA Delegates to the AMA introduce an appropriate resolution requesting the AMA to adopt and develop a nationwide referendum capability allowing each physician member of the AMA to vote on issues and/or proposals for action brought to a nationwide referendum vote by signed petition of 15% of the AMA membership (physician), or 15% of state medical associations, or 15% of the county medical societies of this nation.

Recommendations, Reference Committee No. 6

Reference Committee No. 6 next considered Resolution M—Provision for AMA Referenda, introduced by Campbell-Kenton Medical Society. It was noted that a similar resolution introduced at the AMA Annual Meeting in San Francisco in June of this year was rejected.

It was also taken into consideration that the AMA has undertaken a project of polling its membership regarding current issues in medicine and that this poll is to determine the thinking of individual physicians.

It was also brought up that in the state of Illinois a non-profit organization cannot legally ask for a referendum. Considering the rejection of similar resolutions by the AMA House of Delegates on previous occasions, we recommend that Resolution M not be adopted.

Mr. Speaker, I move the adoption of this section of the report.

The motion was seconded from the floor. Howard Heringer, M.D. of Kenton County was recognized who made a substitute motion that the House vote against the Reference Committee's recommendation and adopt Resolution M. The substitute motion was seconded from the floor, but on a call for a vote, did not pass.

A vote was then taken on the original motion that Resolution M not be adopted, and the motion carried.

Mr. Speaker, I move the adoption of the Report of Reference Committee No. 6 as a whole as amended. (The motion was seconded and carried.)

Mr. Speaker, I would like to thank the members of Reference Committee No. 6, Doctors Michael B. Flynn, Charles D. Franks, Cecil D. Martin and Fred A. Stine. We would also like to thank those who spoke before our Committee and the guidance of the members of the KMA Board of Trustees.

We would like to thank the patience and endurance of Mrs. Shirley Roessler, our secretary.

REFERENCE COMMITTEE NO. 6

Wally O. Montgomery, M.D., Paducah, Chairman
Michael B. Flynn, M.D., Louisville
Charles D. Franks, M.D., Morehead
Cecil D. Martin, M.D., Carrollton
Fred A. Stine, M.D., Highland Heights

Unfinished Business

Doctor Crowder recognized James B. Holloway, Jr., M.D., Chairman of the KMA Board of Trustees. Doctor Holloway moved, on behalf of the Board of Trustees, that the name of James O. Willoughby, M.D., Bowling Green, be placed in nomination for re-election to a full four-year term on the KMA Judicial Council; and that the name of Glenn W. Bryant, M.D., Louisville, be placed in nomination to fill three years of the unexpired four-year term of Samuel D. Weakley, M.D. The motion was seconded from the floor and carried unanimously.

Election of Officers

W. N. Richardson, M.D., Chairman of the KMA Nominating Committee, then proceeded to the podium to give the report of the Nominating Committee. He read the following list of nominations for the positions noted: (*note: all candidates are selected from the state-at-large.*)

| | |
|-----------------|-----------------------------------|
| President-Elect | Carl Cooper, Jr., M.D. Bedford |
|-----------------|-----------------------------------|

It was moved and seconded that the nominations for the office of President-Elect cease, and that Doctor Cooper be elected by acclamation. The motion carried.

Doctor Cooper was then escorted to the podium by Doctors Gardner and Rainey, and received a standing ovation. Doctor Crowder then returned the gavel to Doctor Cooper as Speaker to chair the remainder of the session.

Doctor Richardson continued with his list of nominations:

| | |
|----------------|--------------------------------------|
| Vice-President | Robert S. Howell, M.D. Louisville |
|----------------|--------------------------------------|

It was moved and seconded that Doctor Howell be elected as Vice-President by acclamation. The motion carried.

| | |
|-----------------------------|---|
| Speaker, House of Delegates | Bennett L. Crowder, M.D. Hopkinsville John M. Baird, M.D. Danville |
|-----------------------------|---|

Following a secret ballot, Doctor Crowder was elected as Speaker of the House for a three-year term.

Vice-Speaker, Peter C. Campbell, Jr., M.D.
House of Delegates Louisville
Thomas L. Heavern, Jr., M.D.
Highland Heights

Following a secret ballot, Doctor Campbell was elected as Vice-Speaker of the House for a three-year term.

AMA Delegates (2) David B. Stevens, M.D.
Lexington
Fred C. Rainey, M.D.
Elizabethtown

AMA Alternate Lee C. Hess, M.D.
Delegates (2) Florence
Wally O. Montgomery, M.D.
Paducah

No additional nominations were received from the floor; therefore, it was moved and seconded the nominees listed above for AMA Delegate and Alternate Delegate be elected. Motion carried.

Doctor Richardson then submitted the following nominations for the offices of Trustee and Alternate Trustee on behalf of the district nominating committees:

First District Wally O. Montgomery, M.D.
Paducah
Alternate James E. Adams, M.D.
Paducah
Third District Frank R. Pitzer, M.D.
Hopkinsville
Alternate Henry R. Bell, M.D.
Elkton

Fourth District Charles B. Spalding, M.D.
Bardstown
Alternate Terrell D. Mays, M.D.
Elizabethtown
Twelfth District William T. Watkins, M.D.
Somerset
Alternate Danny M. Clark, M.D.
Somerset
Fourteenth District Harvey A. Page, M.D.
Pikeville
Alternate Jerry D. Fraim, M.D.
Paintsville
Eleventh District Don E. Cloys, M.D.
Alternate only Richmond
(one year)

It was moved and seconded that the above slate of nominees be elected. Motion carried.

Election of 1978 Nominating Committee

The following physicians were elected by the House of Delegates to serve as the Nominating Committee for the 1978 Annual Meeting:

Thomas M. Marshall, M.D., Louisville, Chairman
Glenn W. Bryant, M.D., Louisville
Don E. Cloys, M.D., Richmond
Ward O. Griffen, Jr., M.D., Lexington
L. Martin Wilson, M.D., Bowling Green

It was announced that the Board of Trustees would hold its reorganizational meeting on Thursday at noon in the Jeffersonian Room of the Ramada Inn.

Doctor Cooper adjourned the second session of the 1977 House of Delegates at 10:05 p.m.

Malpractice Insurance

As one of Kentucky's largest insurance agencies with more than 60 years of providing Kentuckians with professional service, we are pleased to announce to the physicians of Kentucky, that we now represent the Insurance Corporation of America.

I.C.A. is an approved surplus lines company, managed by attorneys and physicians who understand the problems of malpractice insurance. The policies issued by I.C.A. are on an occurrence basis for 100,000/300,000, either primary or excess. The rates are low and are based on Kentucky's malpractice history rather than that of the country as a whole.

We believe that I.C.A.'s policies may be of particular interest to the physician who now needs coverage above the primary 100,000/300,000 policy which he carries through his regular sources.

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C.D. HARRIS & SONS CO.

1977 CONSTITUTION AND BYLAWS OF THE KENTUCKY MEDICAL ASSOCIATION

Revised September 28, 1977

CONSTITUTION

| | |
|---------------|---|
| Article I. | Name of the Association |
| Article II. | Purpose of the Association |
| Article III. | Component Societies |
| Article IV. | Composition and Meetings of the Association |
| Article V. | Officers |
| Article VI. | House of Delegates |
| Article VII. | Districts, Sections and District Societies |
| Article VIII. | Board of Trustees |
| Article IX. | Funds and Expenses |
| Article X. | Referendum |
| Article XI. | The Seal |
| Article XII. | Amendments |
| Article XIII. | Definitions |

Article I. Name of Association

The name and title of this organization shall be the Kentucky Medical Association.

Article II. Purpose of the Association

The purpose of the Association shall be to federate and bring into compact organization the entire medical profession of the State of Kentucky and to unite with similar associations in other states to form the American Medical Association, with a view to the extension of medical knowledge; the advancement of medical science and charity; the evaluation of the standards of medical education; the enactment and enforcement of just medical laws; the promotion of friendly intercourse among physicians and the guarding and fostering of their material interests; the protection of the members thereof against unjust assaults upon their professional care, skill or integrity; and to the enlightenment and direction of public opinion in regard to the great problems of state medicine so that the profession shall become more capable and honorable within itself and more useful to the public in the prevention and cure of disease and in prolonging and adding comfort to life.

Article III. Component Societies

Component societies shall consist of those medical societies which hold charters from this Association.

Article IV. Composition and Meetings of the Association

The Association shall consist of the members of the component societies, but the House of Delegates shall have authority to adopt such bylaws regulating the admission and classification of members as it may deem advisable. The Association shall hold an Annual Meeting and such Special Meetings as may be called pursuant to the bylaws.

Articles V. Officers

Section 1. The officers of this Association shall be a President, a President-Elect, a Vice-President,

a Secretary-Treasurer, a Speaker and Vice-Speaker of the House of Delegates, a Trustee and an Alternate Trustee from each district that may be established; and such other officers as may be provided for in the Bylaws.

Section 2. The eligibility, duties and terms of office of all officers of the Association shall be as prescribed in the Bylaws.

Section 3. All officers shall serve until their successors have been elected and installed.

Section 4. All officers shall be elected by the House of Delegates at its Regular Session and shall take office on the last day of the Annual Meeting.

Article VI. House of Delegates

Section 1. The House of Delegates shall be the legislative body of the Association and shall have power, by a two-thirds vote of all the delegates present at that session, to adopt bylaws to carry out the provisions of this Constitution and to provide for the government of the Association in any other manner not inconsistent with this Constitution. It shall meet in Regular Session annually during the Annual Meeting of the Association, and may be called into Special Session under such conditions as may be prescribed in the bylaws.

Section 2. Delegates shall be members of and elected by component county societies in such a manner as may be provided in the Bylaws. Officers of the Association, Delegates and Alternate Delegates of the American Medical Association and five immediate Past Presidents shall be the ex-officio members of the House of Delegates and entitled to vote. All other Past Presidents and Vice-Presidents and Past Chairmen of the Board of Trustees shall be ex-officio members of the House. They shall have the right to speak and debate on the floor of the House but shall not have the right to make a motion, introduce business or an amendment, or vote.

Section 3. The House of Delegates shall elect a Speaker and a Vice-Speaker, one of whom shall preside during the meetings of the House of Delegates. The presiding officer shall not be entitled to a vote except in the event of a tie.

Section 4. The House of Delegates shall be the final judge as to the qualification of its members.

Article VII. Districts, Sections and District Societies

The House of Delegates shall divide the state into Districts composed of one or more counties, for administrative purposes. It may also provide for a division of the scientific work of the Association into appropriate Sections, and for the organization of such District Societies, composed exclusively of members of component societies, as will promote the best interests of the profession.

Article VIII. Board of Trustees

The House of Delegates shall make provision in the bylaws for a Board of Trustees composed of one Trustee from each District and such of the other officers of the Association as the House may deem

appropriate, which shall be charged with the general direction of the Association's affairs during the interim between meetings of the House. The House may delegate such powers to the Board of Trustees as are not specifically required by this Constitution to be exercised by the House, and may limit the Board's powers to such extent as it may determine to be necessary or desirable, provided, however, that in no event shall the Board of Trustees have power to commit the Association to any course of action which is contrary to or at variance with any policy established by the House of Delegates.

Article IX. Funds and Expenses

The House of Delegates shall provide funds for meeting the expenses of the Association by such methods and from such sources as it may select. Funds may be appropriated by the House of Delegates to defray the expenses of the annual session, for publications, and for such other purposes as will promote the welfare of the Association and the profession.

Article X. Referendum

The membership of the Association, by written petition signed by not less than 10% of the active membership, may obtain a referendum on any question pending before the House of Delegates. The Secretary-Treasurer, upon the presentation of such a petition to him shall cause the question to be submitted to the active membership by mail, and if a majority of the active members shall signify its approval or disapproval of a certain policy or course of action with respect to the question thus submitted, the will of the majority shall determine the question and shall be binding upon the House of Delegates and the Association upon certification of the result of the vote by the Secretary-Treasurer to the President and Board of Trustees.

Article XI. The Seal

The Association shall have a common Seal with power to break, change or renew the same at pleasure.

Article XII. Amendments

The House of Delegates may amend any article of this Constitution by a two-thirds vote of the delegates registered at the Regular Session, provided that such amendment shall have been presented in open meeting at the previous regular session, and that it shall have been sent officially to each component county society at least two months before the session at which final action is to be taken.

Article XIII. Definitions

Whenever used in this Constitution, the Articles of Incorporation or the Bylaws—

(a) "County society," "component county society," or "component medical society" means "component society."

(b) "Annual Meeting" means the annual three-day meeting of the Association.

(c) "Scientific Sessions" mean those sessions during the Annual Meeting at which scientific subjects are programmed and discussed.

(d) "Regular Session" means the regular session of the House of Delegates which is held during the Annual Meeting.

(e) "Special Session" means a special, called meeting or session of the House of Delegates.

BYLAWS

- Chapter I. Membership
- Chapter II. Annual and Special Meetings of the Association
- Chapter III. The House of Delegates
- Chapter IV. Election of Officers
- Chapter V. Duties of Officers
- Chapter VI. Board of Trustees
- Chapter VII. Discipline—The Judicial Council
- Chapter VIII. Standing Committees and Councils
- Chapter IX. Assessments and Expenditures
- Chapter X. Rules of Conduct
- Chapter XI. Rules of Order
- Chapter XII. County Societies
- Chapter XIII. Amendments

CHAPTER I. MEMBERSHIP

Section 1. Membership in this Association shall be coterminous with membership in a component county society. No physician shall be eligible for membership in this Association unless he is a member, in good standing of a component society, nor may he maintain membership in a component county society unless he is a member, in good standing of this Association.

When a physician who meets the qualifications hereinafter set forth, is certified to the Secretary-Treasurer as a member in good standing of a component society, properly classified as to type of membership, and when the dues pertaining to his membership classification have been received by the Secretary-Treasurer of the Association, the name of the member shall be included in the official roster of the Association and he shall be entitled to all the privileges of his class of membership. Provided, however, that members in good standing from other state societies may, if admitted to membership by a component society, be accepted by KMA for membership without paying dues for the remainder of the calendar year in which the transfer is made. Provided further, that the Board of Trustees shall have power, upon written application, approved annually by the county society of which the applicant is a member, to excuse any member from the payment of dues because of financial hardship. And provided further, that the Judicial Council, after a hearing, shall have power to condition membership in this Association upon the physician's agreement to limit the scope of his practice in any manner reasonably calculated to protect the public from the adverse effects of any demonstrated frailty or disability of said member.

Section 2. Membership in the Association shall be divided into nine classes, to-wit: Active, Emeritus, In-Training, Associate, Inactive, Student, Service, Honorary and Special.

(a) **Active Members.** The active membership of the Association shall consist of the active members of the various component medical societies. To be eligible for active membership in any component society, the applicant must be a physician who holds an unrestricted or limited license to practice medicine and surgery in this state, and who is of good moral, ethical and professional standing. Nothing contained herein shall prevent a component society from requiring new members to occupy provisional status for a reasonable time after their admittance to membership under any classification.

(b) **Emeritus Members.** Component societies may elect as a member-emeritus any doctor of medicine or osteopathy who has served his profession with distinction and who has either reached the age of 70 or has retired from active practice. Emeritus members shall have the right to vote and be entitled to the benefits of Chapter VI, Section 8 of these Bylaws, but shall not pay dues. They shall receive *The Journal* and other publications of the Association.

(c) **In-Training Members.** Interns, residents, and teaching fellows who are doctors of medicine or osteopathy and who have complied with all pertinent regulations of the Kentucky State Board of Medical Licensure. In-training members shall have the right to vote and receive all publications of the Association, but shall not be counted in determining the number of delegates to which their county society is entitled in the House of Delegates.

(d) **Associate Members.** The associate membership of the Association shall consist of the associate members of the various component medical societies. To be eligible for associate membership in any component society, the applicant must qualify under one or more of the following groups:

(1) Medical officers of the United States Army, Navy, Air Force, Veterans Administration, Public Health Service, or other federal governmental service while on duty in the State, but shall not be deemed to include physicians employed on a full-time basis by the Veterans Administration.

(2) Osteopathic physicians who practice allopathic medicine.

(3) Dentists may be invited to become Associate members.

Associate members shall not have the right to vote nor to hold office, but shall receive *The Journal* and other publications of the Association.

(e) **Inactive Members.** The inactive membership of the Association shall consist of the inactive members of the various component county societies. Any doctor of medicine licensed to practice medicine in Kentucky who is not engaged in the practice of medicine but who is otherwise eligible for active membership in the Association may be admitted to inactive membership by any component county society. Inactive members shall not have the right to vote nor hold office, but shall receive *The Journal* and other publications of the Association.

(f) **Student Members.** Any student in an accredited medical school in Kentucky or any resident of Kentucky who is a student in any accredited medical school in the United States shall be eligible for student membership. They may apply directly to the State Association for membership and be assigned to the county society of their choice. The membership year for student members shall run from October 15 to October 14 of the next year. Student members may not hold office but may be voting members of any committee to which they are appointed. They will be represented in the House of Delegates through one voting representative, a student member of KMA elected by the student body at the University of Kentucky College of Medicine and one voting representative, a student member of the Kentucky Medical Association elected by the student body at the University of Louisville School of Medicine.

(g) **Service Members.** Members of the Association in good standing who enter military service and are ineligible for Associate membership shall be classified as service members. Service Members shall not be required to pay dues. If a member in

good standing enters service prior to April 1 and has paid his dues for that year, he shall receive all publications and other benefits applicable to his class of membership in the Association and shall owe no further dues until January 1 following his release. If a member in good standing enters service prior to April 1 without paying his dues for that year, he shall receive publications and other benefits but shall owe the dues applicable to his class of membership immediately following his release from active duty. Members whose dues have not been received by April 1 are not in good standing.

(h) **Honorary Members.** Any physician possessed of scientific attainments who is a member of a constituent state medical association and who has participated in the program of the scientific session and who is not a citizen of Kentucky may by unanimous vote of the House of Delegates be elected to honorary membership. Honorary members shall be entitled to the privileges of the floor in all scientific sessions.

(i) **Special Members.** Component societies may invite pharmacists, funeral directors, or other professional persons to become special members. Special members shall have no rights or obligations under these Bylaws, but may be accorded the privilege of attending and participating in the scientific meetings of the society, provided, however, that a registration fee may be required of special members who desire to attend the Annual Meeting of the Association.

Section 3. Guests of Honor. Any distinguished physician not a resident of this State may become a guest of honor during any Annual Meeting upon invitation of the Board of Trustees and shall be accorded the privilege of participating in all of the scientific work of that meeting.

Section 4. No person who is finally convicted of a felony subsequent to September 26, 1968, shall be eligible for membership in this Association unless and until, upon proper application to the Judicial Council, it is determined that he is morally and ethically qualified. Except as provided in Chapter VII, Section 4 of these Bylaws, no person who is under sentence of suspension or expulsion from any component society of this Association shall be entitled to any of the rights or benefits of membership of this Association.

CHAPTER II. ANNUAL AND SPECIAL MEETINGS OF THE ASSOCIATION

Section 1. The Association shall hold its annual and special meetings at such times and places as may be determined by the House of Delegates.

Section 2. The Annual Meeting shall consist of one or more scientific sessions, at least two meetings of the House of Delegates, and such other gatherings as may be authorized by the Board of Trustees. Each scientific session shall be presided over by the President or in his absence or disability or at his request by the President-Elect or such officers as the Board of Trustees may direct. The entire time of the scientific sessions, as far as may be, shall be devoted to papers and discussions related to scientific medicine.

Section 3. The name of a physician upon the properly certified roster of members or list of delegates of a component society which has paid its annual assessment, shall be prima facie evidence of his right to register at any meeting of this Association.

Section 4. Each member in attendance at any meeting shall register indicating the component society of which he is a member. When his right to membership has been verified by reference to the roster of the society, he shall receive a badge which shall be evidence of his right to all privileges of membership at that meeting. No member or delegate shall take part in any of the proceedings of any meeting until he has complied with the provisions of this section.

CHAPTER III. THE HOUSE OF DELEGATES

Section 1. The House of Delegates shall meet in Regular Session at the time and place of the Annual Meeting, and shall, insofar as is practicable, fix its hours of meeting so as to give delegates an opportunity to attend the scientific sessions and other proceedings. Provided, however, that if the business interests of the Association and profession require, the Speaker, with the consent of the Board of Trustees, may convene the Regular Session in advance of the Annual Meeting, and the House may remain in session after the final adjournment thereof.

Section 2. The House may be called into Special Session by the President with the approval of the Board of Trustees, and a special session shall be called by the President on the written request of fifty duly elected delegates of the Association. The purpose of all special sessions shall be stated in the call, and all business transacted at any such special session shall be germane to the stated purpose.

Section 3. When a special session is called, the Secretary-Treasurer shall mail a notice of the time, place, and purpose of such meeting to the last known address of each delegate at least ten days before such session.

Section 4. The Speaker shall, by virtue of his office, be responsible for making all arrangements for all sessions, regular or special, of the House.

Section 5. The members of the House of Delegates shall be elected by the various component societies in the manner prescribed in Chapter XII of these Bylaws.

Section 6. In the event a component society is not represented at any meeting of the House, the Speaker shall consult with any officer of the component society who is in attendance and, with the approval of the Credentials Committee, may appoint any active member of such component society who is in attendance, as its alternate delegate. If no officer of such society is present, the Speaker may make the appointment without consultation, but with the approval of the Credentials Committee. All such appointments shall also be subject to the approval of the House.

Section 7. Forty per cent of the qualified delegates, as defined by Article VI of the Constitution, shall constitute a quorum and all of the meetings of the House shall be open to the members of the Association. The House shall have the right to go into executive session whenever in its judgment such action is indicated; except that active members of the Association shall have the right to attend all executive sessions.

Section 8. Each resolution introduced into the House shall be in writing and signed by the author and presented to the Secretary-Treasurer following its introduction. If the author presenting the resolution presents it as an individual member of the Kentucky Medical Association, the resolution shall be signed by him. If the author be a group of members or component society, the resolution shall be signed by the authorized spokesman for that group. Immediately

after the resolution has been introduced, it shall be referred to the proper Reference Committee before action thereon is taken.

Section 9. No resolution shall be introduced in the first meeting of the House of Delegates by any member or group of members other than the Board of Trustees unless a copy thereof was furnished to the Headquarters Office at least seven days prior to its introduction. The only exception to this shall be that a resolution which has been signed by ten or more members of the House of Delegates and of which there are sufficient printed copies to distribute to each member of the House of Delegates may be received for consideration by an affirmative vote of three-fourths of the members present and voting. No new business shall be introduced in the last meeting of the House without unanimous consent, except when presented by the Board of Trustees. All new business so presented shall require the affirmative vote of three-fourths of those delegates present and voting, for adoption.

Section 10. The House shall give diligent attention to and foster the scientific work and spirit of the Association, and shall constantly study and strive to make each Annual Meeting a stepping stone to further ones of higher interest.

Section 11. It shall consider and advise as to the material interests of the profession, and of the public in those important matters wherein the public is dependent upon the profession, and shall use its influence to secure and enforce all proper medical and public health legislation, and to diffuse information in relation thereto.

Section 12. It shall make careful inquiry into the condition of the profession of each county in the State, and shall have authority to adopt such methods as may be deemed most efficient for building up and increasing the interest in such county societies as already exist and for organizing the profession in counties where societies do not exist. It shall especially and systematically endeavor to promote friendly intercourse between physicians of the same locality and shall continue these efforts until every physician in every county of the State who will agree to abide by the constitution, bylaws and other rules and regulations of the Association and the appropriate component society, has been brought under medical society influence.

Section 13. It shall encourage postgraduate work in medical centers as well as home study and research and shall endeavor to have the results of the same utilized and intelligently discussed in the county societies.

Section 14. It shall elect representatives to the House of Delegates of the American Medical Association in accordance with the Constitution and Bylaws of that body.

Section 15. It shall, upon application, provide and issue charters to county societies organized in conformity with the Constitution and Bylaws of this Association.

Section 16. The state shall be divided into the following districts:

No. 1—Ballard, Calloway, Carlisle, Fulton, Graves, Hickman, Livingston, McCracken, and Marshall.

No. 2—Davies, Hancock, Henderson, McLean, Ohio, Union, and Webster.

No. 3—Caldwell, Christian, Crittenden, Hopkins, Lyon, Muhlenberg, Todd, and Trigg.

No. 4—Breckinridge, Bullitt, Grayson, Green, Hardin, Hart, Larue, Marion, Meade, Nelson, Taylor, and Washington.

No. 5—Jefferson.

No. 6—Adair, Allen, Barren, Butler, Cumberland, Edmonson, Logan, Metcalf, Monroe, Simpson, and Warren.

No. 7—Anderson, Carroll, Franklin, Gallatin, Grant, Henry, Oldham, Owen, Shelby, Spencer, and Trimble.

No. 8—Boone, Campbell, and Kenton.

No. 9—Bath, Bourbon, Bracken, Fleming, Harrison, Mason, Nicholas, Pendleton, Scott, and Robertson.

No. 10—Fayette, Jessamine, and Woodford.

No. 11—Clark, Estill, Jackson, Lee, Madison, Menifee, Montgomery, Owsley, Powell, and Wolfe.

No. 12—Boyle, Casey, Clinton, Garrard, Lincoln, McCreary, Mercer, Pulaski, Rockcastle, Russell, and Wayne.

No. 13—Boyd, Carter, Elliott, Greenup, Lawrence, Lewis, Morgan, and Rowan.

No. 14—Breathitt, Floyd, Johnson, Knott, Letcher, Magoffin, Martin, Perry, and Pike.

No. 15—Bell, Clay, Harlan, Knox, Laurel, Leslie, and Whitley.

District meetings may be held as desired, and District Medical Associations may be organized as desired, according to the districts outlined above.

Section 17. It shall have authority to appoint committees for special purposes from among members of the Association who are not members of the House of Delegates and such committees may report to the House of Delegates in person, and may participate in the debate thereon.

Section 18. It shall approve all memorials and resolutions issued in the name of the Association before the same shall become effective, except as provided in Chapter VI, Section 4, and except for the selection of the recipient of the Kentucky Medical Association Award (Outstanding Layman) and Distinguished Service Award (Outstanding Physician), which selections shall be made by the KMA Awards Committee.

Section 19. A digest of proceedings of the House of Delegates shall be published and distributed to the membership annually.

CHAPTER IV. ELECTION OF OFFICERS AND DELEGATES TO THE AMERICAN MEDICAL ASSOCIATION

Section 1. The President-Elect and the Vice President shall be elected from the state at large for a term of one year, the President-Elect succeeding to the presidency at the expiration of his term as President-Elect. A majority vote of those attending and voting shall be required for the election of the President-Elect and the Vice-President and on any ballot where a majority is not obtained, the candidate with the least votes shall be dropped and further balloting held until such time as one candidate receives a majority of the votes cast. Delegates to the AMA and their alternates shall be elected from the state at large for terms of two years, with the provision that no more than one delegate and no more than one alternate delegate shall be elected from one component society. The Speaker of the House of Delegates, the Vice-Speaker and the Secretary-Treasurer shall be elected for terms of three years, but no member shall be eligible for election to more than two consecutive full terms as Secretary-Treasurer. Trustees and their Alternates shall be elected for terms of three years and Trustees shall be limited to

serving for not more than two consecutive full terms. The terms of the Trustees and their Alternates shall coincide and be so arranged that one-third of the terms expire each year, insofar as possible, provided, however, that nothing contained herein shall preclude an Alternate Trustee from serving two full terms as a Trustee. No member shall be eligible for the office of President, President-Elect, Vice-President, Secretary-Treasurer, Speaker or Vice-Speaker of the House of Delegates, Trustee or Alternate Trustee who has not been an active member of the Association for at least three years.

Section 2. During the last meeting of the regular session of the House of Delegates, the Speaker of the House of Delegates shall submit to the members of the House of Delegates a list of ten names from which, by ballot, the House of Delegates shall select five members to serve as the Nominating Committee for the next year. The five names receiving the most votes shall form the Committee, and the person receiving the most votes shall be Chairman. In the event that the Chairman so elected is unable or unwilling to serve, or in the event of a tie, the Committee shall elect one of its members as Chairman. The Committee shall meet at such time and place as determined by the Committee Chairman or the Board of Trustees, and shall schedule an open meeting immediately after the close of the first meeting of the House at each Annual Meeting. This open meeting shall be held in the meeting place of the House of Delegates, shall receive broad publicity, and those who have business to discuss with the committee shall have a hearing. The Nominating Committee shall verify the eligibility and willingness to serve of each candidate nominated. The Committee shall accept and post for information all eligible and willing candidates proposed for offices elected from the state at large. Before noon of the day following the opening meeting, the committee shall post on a bulletin board near the entrance to the hall in which the Annual Meeting is being held, its nomination, or nominations, for each office to be filled, and shall formally present said nomination, or nominations, to the House at the time of the election. Additional nominations may be made from the floor by submitting the nominations without discussion or comment. Vacancies occurring on the Nominating Committee by virtue of death, resignation, or disability, shall be filled by appointment of the Speaker.

Section 3. The election of officers and delegates to the AMA and their alternates shall be held at the second meeting of the regular session of the House of Delegates.

Section 4. All elections shall be by secret ballot, and a majority of the votes cast shall be necessary to elect, provided, however, that when there are more than two nominees, the nominee receiving the least number of votes on the first ballot shall be dropped and the balloting shall continue in like manner until an election occurs.

Section 5. Any member may make known his availability for any office within the gift of the Association. However, it would be regarded as unseemly for any member to actively campaign for his own election.

Section 6. The Delegates representing the counties in each District form the Nominating Committee for the purpose of nominating a Trustee and an Alternate Trustee for the District concerned. This committee shall hold a well publicized meeting open to all active members of the District concerned who are in attendance at the Annual Meeting for the purpose of discussing the nomination of the Trustee and his Alternate to serve the District. Additional nominations may be made from the floor when the Nomi-

nating Committee makes its report to the House of Delegates.

CHAPTER V. DUTIES OF OFFICERS OTHER THAN TRUSTEES AND ALTERNATES

Section 1. Except as provided in Chapter II, Section 2 hereof, the President shall preside at all scientific sessions of the Association and shall appoint all committees not otherwise provided for. He shall deliver an annual address at such time as may be arranged and shall perform such duties as custom and parliamentary usage may require. He shall be the real head of the profession in the State during his term of office and so far as practicable, shall visit or cause to be visited on his behalf, the various sections of the State and assist the Trustees in building up the county societies and in making their work more practical and useful. He shall be reimbursed for his reasonable and necessary travel expense incurred in the performance of his duties as President.

Section 2. The President-Elect shall assist the President in visitation of county and other meetings. He shall become president of the Association at the next Annual Meeting following his election as president-elect. In the event of his death or resignation, or if he becomes permanently disqualified or disabled, his successor shall be elected by the House of Delegates and shall be installed as President of the Association at its next regular session.

Section 3. The Vice President shall assist the President in the discharge of his duties, and shall perform such other duties as may be prescribed by the Board of Trustees. In the event of a vacancy in the office of the President, the Vice President shall succeed to the office of the President.

Section 4. The President-Elect and the Vice-President, when acting for and in behalf of the President, may be reimbursed for their reasonable and necessary travel expenses incurred in the performance of their duties in such amounts as may be available out of the sum appropriated in the annual budget for traveling expenses.

Section 5. The Speaker of the House shall preside at all meetings of the House of Delegates. He shall appoint all committees of the House of Delegates with the approval of the House of Delegates. He shall be a non-voting member of said committees, and shall perform such other duties as custom and parliamentary usage may require.

Section 6. The Vice Speaker shall assume the duties of the Speaker in his absence and shall assist the Speaker in the performance of his duties. In the event of the death, disability, resignation, or removal of the Speaker, the Vice Speaker shall automatically become Speaker of the House of Delegates.

Section 7. The Secretary-Treasurer shall advise the Executive Vice President in all administrative matters of this Association and shall act as the corporate secretary insofar as the execution of official documents or institution of official actions are required. He shall perform such duties as are placed upon him by the Constitution and Bylaws, and as may be prescribed by the Board of Trustees. The Secretary-Treasurer shall demand and receive all funds due the Association, including bequests and donations. He shall, if so directed by the House of Delegates, sell or lease any real estate belonging to the Association and execute the necessary papers and shall, subject to such direction, have the care and management of the fiscal affairs of the Association. All vouchers of the Association shall be signed by the Executive Vice President or his designee and shall be countersigned by the Secretary-Treasurer of the Association. When

one or more of the above-named officials are not readily available, four specifically designated representatives of the Executive Committee are authorized to countersign the vouchers, provided that in any event all vouchers of the Association shall bear a signature and a countersignature. The four members of the Executive Committee authorized to countersign vouchers shall be designated by the Board during their reorganizational meeting in September and, whenever possible should be easily accessible from the KMA Headquarters Office. All those authorized to countersign vouchers shall be required to give bond in an amount to be determined by the Board of Trustees. The Secretary-Treasurer shall report the operations of his office annually to the House of Delegates, via the Board of Trustees, and shall truly and accurately account for all funds belonging to the Association and coming into his hands during the year. His accounts shall be audited annually by a certified public accountant appointed by the Board of Trustees.

CHAPTER VI. BOARD OF TRUSTEES

Section 1. The Board of Trustees shall be the executive body of the House of Delegates and between sessions of the House of Delegates shall exercise the powers conferred upon the House of Delegates by the Constitution and Bylaws. The Board of Trustees shall consist of the duly elected Trustees and the President, the President-Elect, the Vice-President, the immediate Past-President, the Speaker, and Vice-Speaker of the House of Delegates, the Secretary-Treasurer, and the Delegates and Alternate Delegates to the American Medical Association. The Executive Committee of the Board of Trustees shall consist of the President, the Vice-President, the President-Elect, the Secretary-Treasurer, the Chairman of the Board of Trustees, the Vice Chairman of the Board of Trustees, and two trustees to be elected annually by the Board of Trustees. A majority of the full Board, to-wit, 14, and a majority of the full Executive Committee, to-wit, 5, shall constitute a quorum for the transaction of all business by either body. Between sessions of the Board, the Executive Committee shall exercise all of the powers belonging to the Board except those powers specifically reserved by the Board to itself.

Section 2. The Board shall meet daily, or as required, during the Annual Meeting of the Association and at such other times as necessity may require, subject to the call of the Chairman or on petition of three Trustees. It shall meet on the last day of the Annual Meeting for reorganization and for the outlining of the work for the ensuing year. It shall, through its Chairman, make an annual report to the House of Delegates at such time as may be provided, which report shall include an audit of the accounts of the Secretary-Treasurer and other agents of this Association and which shall also specify the character and cost of all the publications of the Association during the year, and the amounts of all other property belonging to the Association, or under its control, with such suggestions as it may deem necessary. By accepting or rejecting this report, the House may approve or disapprove the action of the Board of Trustees in whole or in part, with respect to any matter reported upon therein. In the event of a vacancy in any office other than that of President, the Board may fill the same until the annual election.

Section 3. Each Trustee shall be organizer, peace-maker and censor for his district. He shall hold at least one district meeting each year for the exchange of views on problems relating to organized medicine and for postgraduate scientific study. The necessary traveling expenses incurred by a Trustee in the line of his duties herein imposed may be paid by the Secretary-Treasurer upon a proper itemized statement

but this shall not be constituted to include his expenses in attending the Annual Meeting of the Association.

Section 4. The Board shall have the authority to communicate the views of the profession and of the Association in regard to health, sanitation, and other important matters, to the public and press.

Section 5. The Journal of the Kentucky Medical Association shall be the official organ of the Association and shall be published under the supervision of the Board. The Editor of the Journal shall be elected by the Board. All money received by the Journal or by any member of its staff on its behalf, shall be paid to the Secretary-Treasurer on the first of each month. The Board shall provide for and superintend the publication and distribution of all proceedings, transactions, and memoirs of the Association, and shall have authority to appoint such assistants to the Editor as it deems necessary.

Section 6. All commercial exhibits during the Annual Meeting shall be within the control and direction of the Board.

Section 7. In the event of the death, resignation, removal or disability of a Trustee, between sessions of the House of Delegates, the Alternate Trustee shall succeed to the office of Trustee. In case of disability, the Alternate shall serve until the disability is removed or the Trustee's term expires, and in the absence of the Trustee, the Alternate Trustee shall vote in his place and stead.

Section 8. The Association, upon the request of any member in good standing who is a defendant in a professional liability suit, will provide such member with the consultative service of competent legal counsel selected by the Secretary-Treasurer acting under the general direction of the Executive Committee. In addition, the Association may, upon application to the Board outlining unusual circumstances justifying such action, provide such member with the services of an attorney selected by the Board to defend such suit through one court.

Section 9. The Board shall employ an Executive Vice President whose principal duty shall be to carry out and execute the policies established by the House of Delegates and the Board. His compensation shall be fixed by the Board. The Executive Vice President shall act as general administrative officer and business manager of the Association and shall perform all administrative duties necessary and proper to the general management of the Headquarters Office, except those duties which are specifically imposed by the Constitution and Bylaws upon the officers, committees, councils and other representatives of the Association. He shall refer to the various elected officials all administrative questions which are properly within their jurisdiction.

He shall attend the Annual Meeting, the meetings of the House of Delegates, the meetings of the Board, as many of the committee and council meetings as possible, and shall keep separately the records of their respective proceedings. He shall, at all times, hold himself in readiness to advise and aid, so far as is possible and practicable, all officers, committees, and councils of the Association in the performance of their duties and in the furtherance of the purposes of the Association. He shall be allowed traveling expenses to the extent approved by the Board.

He shall be the custodian of the general papers and records of the Association (including those of the Secretary-Treasurer) and shall conduct the official correspondence of the Association. He shall notify all members of meetings, officers of their election, and committees and councils of their appointment and duties.

He shall account for and promptly turn over to the Secretary-Treasurer all funds of the Association which come into his hands. It shall be his duty to receive all bills against the Association, to investigate their fairness and correctness, to prepare vouchers covering the same, and to forward them to the Secretary-Treasurer for appropriate action. He shall keep an account with the component societies of the amounts of their assessments, collect the same, and promptly turn over the proceeds to the Secretary-Treasurer. He shall, within thirty days preceding each Annual Meeting, submit his financial books and records to a certified public accountant, approved by the Board, whose report shall be submitted to the House of Delegates.

He shall keep a record of all physicians in the State by counties, noting on each his status in relation to his county society, and upon request shall transmit a copy of this list to the American Medical Association.

He shall act as Managing Editor, or otherwise supervise the publication of *The Journal of the Kentucky Medical Association* and such other publications as may be authorized by the House of Delegates, under the guidance and direction of the Board.

He shall perform such additional duties as may be required by the House of Delegates, the Board, or the President, and shall employ such assistants as the Board may direct. He shall serve at the pleasure of the Board, and in the event of his death, resignation, or removal, the Board shall have the power to fill the vacancy. From time to time, or as directed by the Board, he shall make written reports to the Board and House of Delegates concerning his activities and those of the Headquarters Office.

CHAPTER VII. DISCIPLINE — THE JUDICIAL COUNCIL

Section 1. There is hereby created a Judicial Council composed of the Secretary-Treasurer of the Association and four members to be elected by the House of Delegates for terms of four years each. One member shall be elected from each of the traditional eastern, western, and central districts, and one member from the state at large. Members of the first Judicial Council shall be elected for terms of one, two, three, and four years, respectively so that thereafter, one member will be elected each year. The Council shall annually elect a chairman.

To be eligible for membership on the Judicial Council, a nominee shall possess at least one of the following qualifications: (1) Have served one term as an officer, trustee, or a Delegate to the AMA or (2) Have served five years as a member of the House of Delegates.

It shall be the duty of the Board of Trustees to nominate at least one candidate for each vacancy on the Judicial Council, but additional nominations may be made from the floor. Vacancies which occur between Regular Sessions of the House of Delegates, shall be filled by the Board of Trustees. No member, other than the Secretary-Treasurer shall serve more than two consecutive terms.

Section 2. The Judicial Council shall be the Board of Censors of the Association. It shall be the final arbiter of all questions involving the right and standing of members, whether in relation to other members, to the component societies, or to this Association. All charges of breach of medical ethics brought before the House of Delegates shall be referred to the Judicial Council without discussion. A member who has been convicted of a felony or of any violation of the Medical Practice Act, or who violates any of the provisions of the constitution, bylaws, or any rule or regulation of this Association, or the Principles of

Ethics of the American Medical Association shall be liable to censure, fine, suspension, or expulsion upon order of the Judicial Council. Provided, however, that if in addition to discipline by the Association, the Judicial Council shall be of the opinion that the offending member's license to practice medicine should be revoked, it shall report this to the Board of Trustees as a recommendation that the Board refer the matter to the State Board of Licensure for this purpose.

Suspension shall be for a specified period during which the member shall remain liable for the payment of dues but shall not be eligible to hold office, attend business meetings or otherwise participate in Associational activities at the county, district or state levels. Upon the expiration of the period of suspension, every suspended member shall be automatically restored to all of the rights and privileges of his class of membership unless the Judicial Council determines that his conduct during the period of suspension indicates that he is unworthy of such restoration, in which event his suspension may be extended or he may be expelled.

Upon the complaint of any member or aggrieved individual involved, the Judicial Council may initiate disciplinary proceedings against any member, and may intervene in or supersede county, individual trustee, or district disciplinary proceedings, whenever in its sole judgment and opinion, a disciplinary matter is not being handled in an expeditious manner, and may render a decision therein. In all cases in which the Association, rather than a member or aggrieved individual, appears to be the real party in interest, the Judicial Council may refer the complaint to the Board of Trustees for a determination as to whether probable cause for disciplinary action exists. If the Board of Trustees resolves this question in the affirmative, it shall so charge the respondent, and a representative of the Board shall thereupon be responsible for presenting the evidence in support of such charge at any hearing held thereon.

In all proceedings of the Judicial Council, the due process requirements of reasonable notice and a full and fair hearing shall be observed. No recommended disciplinary decision of an individual trustee or any district grievance committee shall become effective unless and until approved by the Judicial Council.

Section 3. It shall consider all appeals from the recommended decisions of individual trustees and District Grievance Committees. In the case of appeals from the decisions of individual trustees, the Judicial Council may admit such oral or written evidence as in its judgment will best and most fairly present the facts, but all appeals from the recommended decisions of District Grievance Committees shall be considered on the record made before such committee. It shall be the duty of the Secretary to notify the parties with respect to its disposition of each case.

Section 4. The Judicial Council may hear appeals from the disciplinary orders of component societies. Provided, however, that such appeals shall be considered on the record made before the component societies.

Section 5. Efforts toward conciliation and compromise shall precede the hearing of all disciplinary cases, but the decision of the Judicial Council shall be final. A party aggrieved by the decision of the Judicial Council may seek an appeal to the Judicial Council of the American Medical Association in accordance with the jurisdiction, rules and regulations of that Association.

Section 6. Component societies are encouraged to create suitable disciplinary procedures which guarantee due process, and to dispose of all disciplinary

problems which come to their attention. It is recognized, however, that it may not be feasible for some societies to do so, and the District Grievance Committees hereinafter created, are designed to meet the needs of county societies which are without a functioning grievance committee.

Section 7. The trustee of each district is hereby designated the chairman of his District Grievance Committee. The Judicial Council shall designate two additional trustees from districts adjoining that of the chairman, and the three trustees thus selected shall constitute the District Grievance Committee. All grievances which cannot be resolved by individual trustees, shall be referred to the local grievance committee or the district grievance committee for the district in which the respondent physician or county society resides.

Section 8. District Grievance Committees shall investigate every grievance coming to their attention, taking care that the physician complained of shall have ample opportunity to respond to the complaint. If, after careful investigation, the complaint appears to be without merit, the committee shall so report to the Judicial Council, including sufficient facts in its report to enable Judicial Council to form its own conclusions.

If the District Grievance Committee's investigation indicates that the member may be a proper subject of disciplinary action, the committee shall, upon reasonable notice, hold a hearing at which the complainant and the respondent shall be entitled to be represented by counsel, to present the testimony of witnesses in his behalf, and to cross-examine witnesses against him. All testimony shall be under oath and shall be recorded by a competent reporter at the expense of the Association, but shall not be transcribed unless and until an appeal is taken as hereinafter provided.

When all of the testimony has been heard and all evidence received, the committee shall make written findings and recommendations which it shall transmit to the Judicial Council, furnishing copies thereof to the parties.

Section 9. Any party aggrieved by the findings or recommendations of the committee, may, within 30 days, appeal to the Judicial Council. Appeals shall be taken by filing with the Secretary-Treasurer a copy of the entire record made before the District Grievance Committee (including a transcript of the testimony, procured at the appellant's expense) together with a written statement of appeal pointing out in detail wherein the committee has erred, and directing the attention of the Judicial Council to those portions of the transcript upon which he relies, provided, however, that the Judicial Council may extend the time in which the transcript must be filed, upon request made within the initial thirty-day period.

Section 10. No report or opinion of the Judicial Council shall be considered the policy of the Association until approved by the House of Delegates. Any report or opinion of the Judicial Council submitted to the House of Delegates may be accepted or rejected or referred back to the Judicial Council but not modified by the House of Delegates.

CHAPTER VIII. COMMITTEES AND COMMISSIONS

Section 1. The Board of Trustees shall have authority from time to time to appoint, fix the duties of, and abolish such standing committees and commissions as it deems necessary or desirable to assist it in carrying on the Association's activities in the fields of business and scientific meetings, medical education and hospitals, legislation, medical services, communications

and public service, and governmental medical services.

Section 2. The Executive Committee shall serve as the nominating committee for all standing committee and commission appointments, but the trustees may make additional nominations. When the Executive Committee sits as such nominating committee, the President-Elect shall serve as Chairman.

Section 3. The President, with the advice and consent of the Chairman of the Board of Trustees, may appoint temporary, ad hoc committees to perform specified functions. All such committees shall expire at the end of the term of the President by whom appointed.

Section 4. No committee or commission shall have power or authority to fix or determine Associational policy or to commit the Association to any course of action, such powers being expressly reserved to the House of Delegates and the Board of Trustees.

CHAPTER IX. ASSESSMENTS AND EXPENDITURES

Section 1. The annual dues for membership in this Association shall be as follows: (1) Active Members, \$225; (2) Emeritus Members, no dues; (3) Associate Members, \$25; (4) In-Training Members, \$20; (5) Inactive Members, \$25; (6) Student Members, \$10; (7) Service Members, no dues; (8) Special Members, no dues. The dues during the first year for any active member shall be pro-rated on the basis of the date of his application. Dues fixed by these Bylaws shall constitute assessments against the component societies. Unless otherwise instructed by the Board of Trustees (which may institute centralized billing) the Secretary of each component society shall forward its assessments together with its properly classified roster of all officers and members, list of delegates, and list of non-affiliated physicians of the county to the Secretary-Treasurer of this Association as of the first day of January each year.

Section 2. Unless otherwise provided by the Board of Trustees pursuant to Section 1 hereof, any component society which fails to pay its assessments, or make the report as required, on or before the first day of April in each year, shall be held as suspended and none of its members or delegates shall be permitted to participate in any of the business or proceedings of the Association or of the House of Delegates until such requirements have been met.

Section 3. All motions and resolutions appropriating money shall specify a definite amount or so much thereof as may be necessary for the purpose, and must have prior approval of the Board of Trustees before they can become effective. No motion or resolution, the adoption of which would require a substantial expenditure of funds, shall be considered by the House of Delegates unless the funds have been budgeted or are provided by the motion or resolution.

CHAPTER X. RULES OF CONDUCT

The principles set forth in the Principles of Ethics of the American Medical Association, together with the Constitution and Bylaws of the Association and all duly adopted resolutions of the House of Delegates, shall govern the conduct of members in their relation to each other and to the public.

CHAPTER XI. RULES OF ORDER

The deliberations of this Association shall be governed by parliamentary usage as contained in the latest edition of Sturgis' Standard Code of Parlia-

mentary Procedure, unless otherwise determined by a vote of its respective bodies.

CHAPTER XII. COUNTY SOCIETIES

Section 1. Except as provided in Section 3 of this Chapter, all county medical societies in this State which have adopted principles of organization not in conflict with this Constitution and Bylaws shall, upon application to the House of Delegates, receive a charter from and become a component part of this Association.

The House of Delegates shall have authority to evoke the charter of any component society whose actions are in conflict with the letter or spirit of this Constitution and Bylaws.

Section 2. As rapidly as can be done after the adoption of this Constitution and Bylaws, a medical society shall be organized in every county in the state in which no component society exists, and charters shall be issued thereto.

Section 3. Only one component society shall be chartered in any county. Membership in the component society thus created shall entitle the members thereof to all the rights and benefits of membership in the Kentucky Medical Association.

Section 4. In sparsely settled sections two or more component societies may join for scientific programs, the election of officers, and such other matters as they may deem advisable. The component societies thus combined shall not lose any of their privileges or representation. The active members of each component society shall annually elect at least a Secretary and a Delegate for the transaction of its business with the Association.

Two or more adjacent component societies may also combine into one multi-county component society by adopting resolutions to that effect at special meetings called for that purpose on at least ten days' notice. Copies of the resolution, certified as to their adoption by the Secretary of each society, shall be forwarded to the Headquarters Office. If approved by the Board of Trustees, the multi-county society shall thereupon be issued a charter, the consolidating county societies shall cease to exist and the multi-county society shall become a component society of this Association; provided, however, that the active members residing in each county comprising the multi-county society shall be entitled to elect a delegate or delegates to the House of Delegates, as if each such county constituted a component society within the meaning of Section 11 of this Chapter; and provided, further, that multi-county societies may elect, at large, one alternate delegate for each delegate to which it is entitled under this section and such alternate may serve in the absence of the delegate for whom he is the designated alternate.

Section 5. Each component society shall be the sole judge of the qualifications of its own members. All members of component societies shall be members of the Kentucky Medical Association and shall be classified in accordance with Chapter I, Section 2 of these Bylaws, provided, however, that no physician who is under suspension or who has been expelled shall thereafter, without reinstatement by the Board of Trustees be eligible for membership in any component society. Any physician who desires to become a member of the Kentucky Medical Association shall first apply to the component society in the county in which he resides, for membership therein. Except as hereinafter provided in Sections 6 and/or 8 of this chapter, no physician shall be an active member of a component society in any county other than the county in which he resides.

Section 6. Any physician who may feel aggrieved by the action of the component society of the county in which he resides, in refusing him membership, shall have the right to appeal to the Board of Trustees, which, upon a majority vote, may permit him to apply for membership in a component society in a county which is adjacent to the county in which he resides.

Section 7. When a member in good standing in a component society moves to another county in the State, his name, upon request, shall be transferred without cost to the roster of the component society into whose jurisdiction he moves, if he is admitted to membership therein.

Section 8. A physician whose residence is closer to the headquarters of an adjacent component society than it is to the headquarters of the component society of the county in which he resides, may, with the consent of the component society within whose jurisdiction he resides, hold membership in said adjacent component society.

Section 9. Each component society shall have general direction of the affairs of the profession in the county, and its influence shall be constantly exerted for bettering the scientific, moral and material conditions of every physician in the county. Systematic efforts shall be made by each member, and by the society as a whole, to increase the membership until it embraces every qualified physician in the county.

Upon reasonable notice and after a hearing, component societies may discipline their members by censure, fine, suspension or expulsion, for any breach of the Principles of Medical Ethics or any bylaw, rule or regulation lawfully adopted by such societies or this Association. At every hearing, the accused shall be entitled to be represented by counsel and to cross-examine witnesses, and the society shall cause a stenographic record to be made of the entire proceedings. The stenographer's notes need not be transcribed unless and until requested by the respondent member.

Any physician aggrieved by the disciplinary action of a component society may, within ninety (90) days, appeal to the Judicial Council, whose decision shall be final. This appeal shall be in writing and shall point out in detail the errors committed by the county society. It shall be accompanied by a transcript of the proceedings before the county society, procured at appellant's expense, and the statement of appeal shall direct the attention of the Judicial Council to those portions of the transcript upon which he relies.

Any member who fails or refuses to comply with the lawful disciplinary orders of his component society shall, if such failure or refusal continues for more than thirty (30) days, be automatically suspended from membership, provided, however, that an appeal shall stay the suspension until a final decision is made by the Judicial Council.

The resignation of a member against whom disciplinary charges are pending or who is in default of the disciplinary judgment of his county society, a district grievance committee or the Board of Trustees shall not be accepted and no member who is suspended or expelled may be reinstated or readmitted unless and until he complies with all lawful orders of his component society and the Board of Trustees.

Section 10. Frequent meetings shall be encouraged and the most attractive programs arranged that are possible. Members shall be especially encouraged to do postgraduate and original research work, and to give the society the first benefit of such labors. Official positions and other references shall be unstintingly given to such members.

Section 11. At the time of the annual election of officers, each component society shall elect a delegate or delegates to represent it in the House of Delegates. The term of a delegate shall commence on the first day of the regular session of the House following his election, and shall end on the day before the first day of the next regular session, provided, however, that component societies may elect delegates for more than one term at any election. Each component society may elect one delegate for each 25 voting members in good standing, plus one delegate for one or more voting members in excess of multiples of 25, provided, however that each component society shall be entitled to at least one delegate regardless of the number of voting members it may have and that each multi-county society shall be entitled to the same number of delegates as its component societies would have had. The secretary of the society shall send a list of such delegates to the Secretary-Treasurer of this Association not later than 45 days before the next Annual Meeting. It shall be the obligation of a component society which elects delegates to serve more than one year, to provide the KMA Headquarters Office with a certified list of its delegates each year.

Section 12. The secretary of each component society shall keep a roster of its members and a list of non-affiliated licensed physicians of the county, in which shall be shown the full name, address, college and date of graduation, date of license to practice in this State, and such other information as may be deemed necessary. He shall furnish an official report containing such information upon blanks supplied him for the purpose, to the Secretary-Treasurer of the Association, on the first day of January of each year or as soon thereafter as possible, and at the same time the dues accruing from the annual assessment are sent in. In keeping such roster the secretary shall note any change in the personnel of the profession by death or by removal to or from the county, and in making his annual report he shall be certain to account for every physician who has lived in the county during the year.

CHAPTER XIII. AMENDMENTS

Section 1. These bylaws may be amended at any session of the House of Delegates by a majority vote of the delegates present at that session, provided: (1) the amendment proposed is presented in writing to the delegates thirty days prior to the session, or, (2) the amendment is introduced in writing at a regular session of the House of Delegates and considered at the following session, the vote on said amendment having been postponed definitely for a period of at least one day.

Section 2. An amendment to or change in the bylaws may be proposed by a reference committee or by the Board of Trustees at the final session of the House of Delegates, but, not having been postponed definitely for a period of one day, requires a two-thirds vote.

Section 3. An amendment to these bylaws may be proposed in writing by an individual delegate at the final session of the House of Delegates. If such an amendment is proposed, the proposal will be postponed definitely and studied by the appropriate reference committee at that time, reporting their recommendation back to the House of Delegates before the final session is adjourned. Such an amendment having not been postponed definitely for a period of one day, requires a two-thirds vote.

When pain complicates acute cystitis*

Azo Gantanol[®]

Each tablet contains 0.5 Gm sulfamethoxazole and 100 mg phenazopyridine HCl

for the pain for the pathogens



- **Early relief of painful symptoms** such as burning and pain associated with urgency and frequency.

- **Effective control of susceptible pathogens** such as *E. coli*, *Klebsiella-Aerobacter*, *Staph. aureus*, *Proteus mirabilis* and, less frequently, *Proteus vulgaris*.

- **Appropriate antibacterial therapy:** up to three days therapy with Azo Gantanol, then 11 days with Gantanol[®] (sulfamethoxazole), 0.5 Gm tablets.

*Nonobstructed; due to susceptible organisms

Before prescribing, please consult complete product information, a summary of which follows:

Indications: In adults, urinary tract infections complicated by pain (primarily pyelonephritis, pyelitis and cystitis) due to susceptible organisms (usually *E. coli*, *Klebsiella-Aerobacter*, *Staphylococcus aureus*, *Proteus mirabilis* and, less frequently, *Proteus vulgaris*) in the absence of obstructive uropathy or foreign bodies.

Note: Carefully coordinate *in vitro* sulfonamide sensitivity tests with bacteriologic and clinical response; add aminobenzoic acid to follow-up culture media. The increasing frequency of resistant organisms limits the usefulness of antibacterials including sulfonamides. Measure sulfonamide blood levels as variations may occur; 20 mg/100 ml should be maximum total level.

Contraindications: Children below age 12; sulfonamide hypersensitivity; pregnancy at term and during nursing period; because Azo Gantanol contains phenazopyridine hydrochloride it is contraindicated in glomerulonephritis, severe hepatitis, uremia, and pyelonephritis of pregnancy with G.I. disturbances.

Warnings: Safety during pregnancy not established. Deaths from hypersensitivity reactions, agranulocytosis, aplastic anemia and other blood dyscrasias have been reported and early clinical signs (sore throat, fever, pallor, purpura or jaundice) may indicate serious blood disorders. Frequent CBC and urinalysis with microscopic examination are recommended during sulfonamide therapy.

Precautions: Use cautiously in patients with impaired renal or hepatic function, severe allergy, bronchial asthma; in glucose-6-phosphate dehydrogenase-deficient individuals in whom dose-related hemolysis may occur. Maintain adequate fluid intake to prevent crystalluria and stone formation.

Adverse Reactions: Blood dyscrasias (agranulocytosis, aplastic anemia, thrombocytopenia, leukopenia, hemolytic anemia, purpura,

hypoprothrombinemia and methemoglobinemia); allergic reactions (erythema multiforme, skin eruptions, Stevens-Johnson syndrome, epidermal necrolysis, urticaria, serum sickness, pruritus, exfoliative dermatitis, anaphylactoid reactions, periorbital edema, conjunctival and scleral injection, photosensitization, arthralgia and allergic myocarditis); G.I. reactions (nausea, emesis, abdominal pains, hepatitis, diarrhea, anorexia, pancreatitis and stomatitis); CNS reactions (headache, peripheral neuritis, mental depression, convulsions, ataxia, hallucinations, tinnitus, vertigo and insomnia); miscellaneous reactions (drug fever, chills, toxic nephrosis with oliguria and anuria, periarteritis nodosa and L. E. phenomenon). Due to certain chemical similarities with some goitrogens, diuretics (acetazolamide, thiazides) and oral hypoglycemic agents, sulfonamides have caused rare instances of goiter production, diuresis and hypoglycemia. Cross-sensitivity with these agents may exist.

Dosage: Azo Gantanol is intended for the acute, painful phase of urinary tract infections. *Usual adult dosage:* 2 Gm (4 tabs) initially, then 1 Gm (2 tabs) B.I.D. for up to 3 days. If pain persists, causes other than infection should be sought. After relief of pain has been obtained, continued treatment with Gantanol (sulfamethoxazole) may be considered.

Note: Patients should be told that the orange-red dye (phenazopyridine HCl) will color the urine.

Supplied: Tablets, red, film-coated, each containing 0.5 Gm sulfamethoxazole and 100 mg phenazopyridine HCl—bottles of 100 and 500.

ROCHE

Roche Laboratories
Division of Hoffmann-La Roche Inc.
Nutley, New Jersey 07110

TRIAMTERENE CONSERVES POTASSIUM WHILE HYDROCHLOROTHIAZIDE LOWERS BLOOD PRESSURE **DYAZIDE®**

Each capsule contains 50 mg. of Dyrenium® (triamterene, SK&F Co.) and 25 mg. of hydrochlorothiazide.

MAKES SENSE

Before prescribing, see complete prescribing information in SK&F Co. literature or PDR. A brief summary follows:

* Warning

This drug is not indicated for initial therapy of edema or hypertension. Edema or hypertension requires therapy titrated to the individual. If this combination represents the dosage so determined, its use may be more convenient in patient management. Treatment of hypertension and edema is not static, but must be reevaluated as conditions in each patient warrant.

* **Indications:** When the combination represents the dosage determined by titration: Adjunctive therapy in edema associated with congestive heart failure, hepatic cirrhosis, the nephrotic syndrome. Corticosteroid and estrogen-induced edema, idiopathic edema; hypertension, when the potassium sparing action of triamterene is warranted. (See Box Warning.) Routine use of diuretics in healthy pregnant women is inappropriate; they are indicated in pregnancy only when edema is due to pathological causes.

Contraindications: Further use in anuria, progressive renal or hepatic dysfunction, hyperkalemia. Pre-existing elevated serum potassium. Hypersensitivity to either component or other sulfonamide-derived drugs.

Warnings: Do not use potassium supplements, dietary or otherwise, unless hypokalemia develops or dietary intake of potassium is markedly impaired. If supplementary potassium is needed, potassium tablets should not be used. Hyperkalemia can occur, and has been associated with cardiac irregularities. It is more likely in the severely ill, with urine volume less than one liter/day, the elderly and diabetics with suspected or confirmed renal insufficiency. Periodically, serum K^+ levels should be determined. If hyperkalemia develops, substitute a thiazide alone, restrict K^+ intake. Associated widened QRS complex or arrhythmia requires prompt additional therapy. Thiazides cross the placental barrier and appear in cord blood. Use in pregnancy requires weighing anticipated benefits against possible hazards, including fetal or neonatal jaundice, thrombocytopenia, other adverse reactions seen in adults. Thiazides appear and triamterene may appear in breast milk. If their use is essential, the patient should stop nursing. Adequate information on use in children is not available.

Precautions: Do periodic serum electrolyte determinations (particularly important in patients vomiting excessively or receiving parenteral fluids).

Periodic BUN and serum creatinine determinations should be made, especially in the elderly, diabetics or those with suspected or confirmed renal insufficiency. Watch for signs of impending coma in severe liver disease. If spironolactone is used concomitantly, determine serum K^+ frequently; both can cause K^+ retention and elevated serum K^+ . Two deaths have been reported with such concomitant therapy (in one, recommended dosage was exceeded, in the other serum electrolytes were not properly monitored). Observe regularly for possible blood dyscrasias, liver damage, other idiosyncratic reactions. Blood dyscrasias have been reported in patients receiving triamterene, and leukopenia, thrombocytopenia, agranulocytosis, and aplastic anemia have been reported with thiazides. Triamterene is a weak folic acid antagonist. Do periodic blood studies in cirrhotics with splenomegaly. Antihypertensive effect may be enhanced in post-sympathectomy patients. Use cautiously in surgical patients. The following may occur: transient elevated BUN or creatinine or both, hyperglycemia and glycosuria (diabetic insulin requirements may be altered), hyperuricemia and gout, digitalis intoxication (in hypokalemia), decreasing alkali reserve with possible metabolic acidosis.

'Dyazide' interferes with fluorescent measurement of quinidine.

Adverse Reactions:

Muscle cramps, weakness, dizziness, headache, dry mouth; anaphylaxis, rash, urticaria, photosensitivity, purpura, other dermatological conditions;

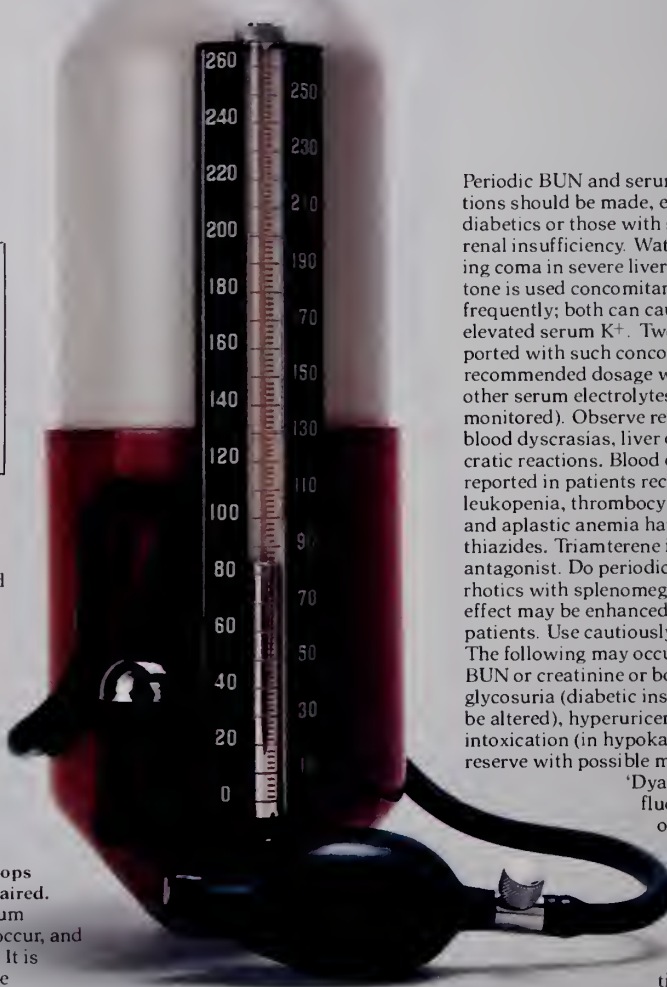
nausea and vomiting, diarrhea, constipation, other gastrointestinal disturbances. Necrotizing vasculitis, paresthesias, icterus, pancreatitis, xanthopsia and, rarely, allergic pneumonitis have occurred with thiazides alone.

Supplied: Bottles of 100 and 1000 capsules; Single Unit Packages of 100 (intended for institutional use only).

**FOR LONG-TERM CONTROL
OF HYPERTENSION*
SERUM K^+ AND BUN SHOULD
BE CHECKED PERIODICALLY.
(SEE WARNINGS SECTION.)**

SK&F CO., Carolina, P.R. 00630

SK&F CO.
a SmithKline company



THREE-IN-ONE THERAPY AGAINST TOPICAL INFECTION

Neosporin[®] Ointment

(Polymyxin B-Bacitracin-Neomycin)

This potent broad-spectrum antibacterial provides overlapping action to help combat infection caused by common susceptible pathogens (including staph and strep). The petrolatum base is gently occlusive, protective and enhances spreading.

Neomycin

Staphylococcus
Haemophilus
Klebsiella
Aerobacter
Escherichia
Proteus
Corynebacterium
Streptococcus
Pneumococcus

Bacitracin

Staphylococcus
Corynebacterium
Streptococcus
Pneumococcus

Polymyxin B

Pseudomonas
Haemophilus
Klebsiella
Aerobacter
Escherichia

In vitro overlapping antibacterial action of Neosporin[®] Ointment (polymyxin B-bacitracin-neomycin).



Burroughs Wellcome Co.
Research Triangle Park
North Carolina 27709

Neosporin[®] Ointment

(Polymyxin B-Bacitracin-Neomycin)

Each gram contains: Aerosporin[®] brand Polymyxin B Sulfate 5,000 units; zinc bacitracin 400 units; neomycin sulfate 5 mg (equivalent to 3.5 mg neomycin base); special white petrolatum qs; in tubes of 1 oz and 1/2 oz and 1/32 oz (approx.) foil packets.

WARNING: Because of the potential hazard of nephrotoxicity and ototoxicity due to neomycin, care should be exercised when using this product in treating extensive burns, trophic ulceration and other extensive conditions where absorption of neomycin is possible. In burns where more than 20 percent of the body surface is

affected, especially if the patient has impaired renal function or is receiving other aminoglycoside antibiotics concurrently, not more than one application a day is recommended.

When using neomycin-containing products to control secondary infection in the chronic dermatoses, it should be borne in mind that the skin is more liable to become sensitized to many substances, including neomycin. The manifestation of sensitization to neomycin is usually a low grade reddening with swelling, dry scaling and itching; it may be manifest simply as failure to heal. During long-term use of neomycin-containing products, periodic examination for such signs is advisable and the patient should be told to discontinue the product if they are observed. These symptoms regress quickly on withdrawing the medication. Neomycin-containing applications should be avoided for that patient thereafter.

PRECAUTIONS: As with other antibacterial preparations, prolonged use may result in overgrowth of nonsusceptible organisms, including fungi. Appropriate measures should be taken if this occurs.

ADVERSE REACTIONS: Neomycin is a not uncommon cutaneous sensitizer. Articles in the current literature indicate an increase in the prevalence of persons allergic to neomycin. Ototoxicity and nephrotoxicity have been reported (see Warning section).

Complete literature available on request from Professional Services Dept. PML.

OLBY PROCLAIMS WOMAN SUFFRAGE

**Signs Certificate of Ratification
at His Home Without
Women Witnesses.**

MILITANTS VEXED AT PRIVACY.

**Wanted Movies of Ceremony,
But Both Factions Are**

WASHINGTON, Aug. 26, 1920—
The struggle for wom-



TRUMAN CLOSES UNITED NATIONS CONFERENCE WITH PLEA TO TRANSLATE CHARTER INTO DEEDS

NEW WORLD HOPE

**President Hails 'Great
Instrument of Peace,'
Insists It Be Used**

HISTORIC LANDMARK

**Meeting Gives Standing
Ovation as Executive
Pictures Peace Gain**

"If we fail to use it," he declared to the solemn final meeting of the delegates, "we shall betray all of those who have died in order that we might meet here in freedom and safety to create it."

"If we seek to use it selfishly—for the advantage of any one nation or any small group of nations—we shall be equally guilty of that betrayal."

Fervent Interpolation

The President, speaking in the auditorium of the War Memorial Opera House, built in memory of sons of the Golden Gate city who gave their lives in the first World War, in which he himself served, seemed to give unconscious expression to the solemn feeling of the occasion when, at the outset of his speech, he interpolated the words, half a hope, half a prayer:

"Oh, what a great day this can be in history!"

Social Security Bill Is Signed; Gives Pensions to Aged, Job

**Roosevelt Approves Message Intended to Benefit 30,000,000
Persons When States Adopt Cooperating Laws—He
the Measure 'Cornerstone' of His Economic Program**

SENATE APPROVES 18-YEAR OLD VOTE IN ALL ELECTIONS

**Amendment to Constitution
is Sent to House, Where
Passage is Expected**

**WASHINGTON, March 10,
1971—The Senate approved
today, 94 to 0 and sent to**

WASHINGTON, Aug. 1
The Social Security Bill, providing a broad program of unemployment insurance and old age pensions, and counted upon to benefit 20,000,000 persons, became law today when it was signed by President Roosevelt in the presence of those chiefly responsible for putting it through Congress.

Mr. Roosevelt called the bill "the cornerstone of my economic program which is being completed by the Social Security Act."

the Draft Ends No

**WASHINGTON, Jan. 27,
1973—"With the signing of
the peace agreement in
Paris today, and after receiving a report from the**



PATIENT PACKAGE INSERTS: A CONCEPT WHOSE TIME HAS COME?

The consumer's right to know is an irreversible and desirable trend of the Seventies. It extends, and properly, to a patient's right to know more about his or her prescription medications. One way, gaining favor, is through patient package inserts. Wisely-prepared and properly distributed when medically indicated, they could markedly improve patient knowledge and drug therapy—laudable goals by anyone's standards.

The PMA endorses these goals and will work with government, the health professions and consumers to achieve them.

The Advantages

The concept holds promise of benefits: better patient understanding of the product prescribed, better adherence to the treatment plan, and more awareness of possible side reactions.

Every doctor has had patients who fail to finish antibiotic regimens because they feel better. Some patients assume that if one tranquilizer or analgesic is good, two may be twice as good. Still others fail to report dizziness while on antihypertensive therapy—and so on.

Problems like these might arise less often if the patient received written information in addition to verbal instructions. Some studies suggest that patients are more receptive to such materials, and they more often understand the verbal instructions and follow them, when inserts are used.

The Disadvantages

There are also some potential problems. Obviously, the inserts must be clearly phrased, without extraneous or complex detail. How much information

is enough? How can it be kept current? Should all patients receive the same information? Should inserts be included with all drugs? Should only potential problems be listed or are patients better off with a "fair balance" presentation that describes usefulness as well as drawbacks?

These and similar questions require answers, since model inserts have yet to be properly developed and tested. Despite the need for these studies, the FDA is proceeding prematurely with inserts on selected products. We think the Congress is the only place where the matter can be given the proper legal status and direction, particularly since it represents a conceptual change in the legal, medical and social framework of the nation's prescription drug information system.

The Solution

The PMA believes that carefully-devised pilot studies of various kinds of inserts are needed. They should be developed and implemented with full participation by doctors, pharmacists, consumers, communications experts and the drug industry. Such studies will provide reliable pathways to follow, so that inserts will be useful aids to medical practice.

And particularly we think that you should be closely involved in this debate and in these studies and decisions. Otherwise, people with less experience and qualifications may control the purposes, content and use of a tool with considerable promise for improved patient care. It could make a difference in your practice tomorrow, and more importantly, in the health of your patients.

PMA

THE PHARMACEUTICAL MANUFACTURERS ASSOCIATION
1155 FIFTEENTH ST., N. W., WASHINGTON, D. C. 20005

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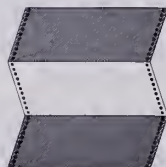
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MEDICAL PROTECTIVE COMPANY
FORT WAYNE, INDIANA

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THE ANXIETY-SPECIFIC.

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- rarely interferes with mental acuity
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LIBRIUM® chlordiazepoxide HCl/Roche 5mg, 10mg, 25mg capsules

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Relief of anxiety and tension occurring alone or accompanying various disease states.

Contraindications: Patients with known hypersensitivity to the drug.

Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. As with all CNS-acting drugs, caution patients against hazardous occupations requiring complete mental alertness (e.g., operating machinery, driving). Though physical and psychological dependence have rarely been reported on recommended doses, use caution in administering to addiction-prone individuals or those who might increase dosage; withdrawal symptoms (including convulsions), following discontinuation of the drug and similar to those seen with barbiturates, have been reported.

Usage in Pregnancy: Use of minor tranquilizers during first trimester should almost always be avoided because of increased risk of congenital malformations as suggested in several studies. Consider possibility of pregnancy when instituting therapy; advise patients to discuss therapy if they intend to or do become pregnant.

Precautions: In the elderly and debilitated, and in children over six, limit to smallest effective dosage (initially 10 mg or less per day) to preclude ataxia or oversedation, increasing gradually as needed and tolerated. Not recommended in children under six. Though generally not recommended, if combination therapy with other psycho-

Libritabs® (chlordiazepoxide) available in 5 mg, 10 mg and 25 mg tablets.



tropics seems indicated, carefully consider individual pharmacologic effects, particularly in use of potentiating drugs such as MAO inhibitors and phenothiazines. Observe usual precautions in presence of impaired renal or hepatic function. Paradoxical reactions (e.g., excitement, stimulation and acute rage) have been reported in psychiatric patients and hyperactive aggressive children. Employ usual precautions in treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation have been reported very rarely in patients receiving the drug and oral anticoagulants; causal relation-

ship has not been established clinically.

Adverse Reactions: Drowsiness, ataxia and confusion may occur, especially in the elderly and debilitated. These are reversible in most instances by proper dosage adjustment, but are also occasionally observed at the lower dosage ranges. In a few instances syncope has been reported. Also encountered are isolated instances of skin eruptions, edema, minor menstrual irregularities, nausea and constipation, extrapyramidal symptoms, increased and decreased libido—all infrequent and generally controlled with dosage reduction; changes in EEG patterns (low-voltage fast activity) may appear during and after treatment; blood dyscrasias (including agranulocytosis), jaundice and hepatic dysfunction have been reported occasionally, making periodic blood counts and liver function tests advisable during protracted therapy.

Usual Daily Dosage: Individualize for maximum beneficial effects. *Oral—Adults:* Mild and moderate anxiety and tension, 5 or 10 mg *t.i.d.* or *q.i.d.*; severe states, 20 or 25 mg *t.i.d.* or *q.i.d.* *Geriatric patients:* 5 mg *b.i.d.* to *q.i.d.* (See Precautions.)

Supplied: Librium® (chlordiazepoxide HCl) Capsules, 5 mg, 10 mg and 25 mg—bottles of 100 and 500; Tel-E-Dose® packages of 100, available in trays of 4 reverse-numbered boxes of 25, and in boxes containing 10 strips of 10; Prescription Paks of 50, available singly and in trays of 10.

Libritabs® (chlordiazepoxide) Tablets, 5 mg, 10 mg and 25 mg—bottles of 100 and 500. With respect to clinical activity, capsules and tablets are indistinguishable.



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Please see preceding page for a summary of product information.

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